



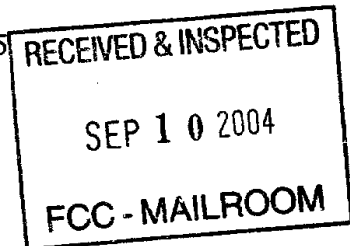
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September 7, 2005



Commissioner Michael J. Copps
Federal Communications Commission

RE: Notice of Inquiry
Violent Television Programming and Its Impact on Children
MB Docket No. 04-261
July 28, 2004

Dear Commissioner Copps:

In this packet you will find two items I am submitting in response to the Notice of Inquiry regarding Violent Television Programming and Its Impact on Children. The first is an article that I published in the *Journal of Broadcasting & Electronic Media* (2003, 47(1), 36-57), "Prime-Time Violence 1993-2001: Has the Picture Really Changed?" The second is part of a chapter in a book, *Violence in the Media: A Reference Handbook*, that is currently in production and will be published by ABC-CLIO in 2005. These materials provide trend data regarding levels of violence in broadcast prime time programming and I believe will be helpful in your inquiry.

This research reported in both of these documents was conducted in the tradition of the content analyses conducted as part of the Cultural Indicators Project. These analyses began in 1968 when the President's Commission of the Causes and Prevention of Violence (Eisenhower Commission) requested that Professor George Gerbner (The Annenberg School for Communication, University of Pennsylvania) examine the levels of violence in prime time programming. The research continued as part of the Surgeon General's study of Television and Social Behavior (1969-1972) and then with funding from NIMH, the American Medical Association, and numerous other agencies through the early 1990s. I have been a member of the Cultural Indicators Research Team since 1968, first while at the Annenberg School and later as part of my research program at the University of Delaware.

The definition of violence is the same as used in the earlier work of George Gerbner and his associates (see, for example, Gerbner, G., Gross, L., Signorielli, N., Morgan, M., & Jackson-Beeck, M. (1979). *The Demonstration of Power: Violence Profile No. 10, Journal of Communication*, 29:3, 177-196 and Signorielli, N., Gross, L., & Morgan, M. (1982). *Violence in Television Programs: Ten Years Later*. in D. Pearl, J. Lazar, and L. Bouthilet (eds.), *Television and Behavior: Ten Years of Scientific Progress and Implications for the 80's*, National Institute of Mental Health). This work defines violence as "the overt expression of

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physical force (with or without a weapon, against self or other) compelling action against one's will on pain of being hurt or killed, or actually hurting or killing." The samples in this work consist of intact weeks of prime time programming broadcast in the fall (late September) of each year included in the studies; in addition during the 1990s some samples of spring programming were included (late January). The data reported in the JOBEM article covers samples broadcast between 1993 and 2001; the data in the upcoming book chapter includes samples broadcast between 1967 and 2003. The data reported from the 1960s, 1970s, and 1980s were collected as part of the Cultural Indicators Project at the University of Pennsylvania; the more recent data collected at the University of Delaware. The UD samples of programs were expanded in 1993 to include reality programs; award, game, and variety programs; and news magazine programs.

The JOBEM article provides information about the levels of violence on prime-time television broadcast between 1993 and 2001 and shows that the levels of violence in the 1990s were similar to levels of violence found in similar studies conducted during the 1970s and 1980s. Violence continued to appear in 60% of the programs at a rate of 4.5 acts of violence per program. The analysis also shows that violence in prime time broadcast programs tends to be context-free with little graphic violence, few characters punished for their involvement in violence, and few overall consequences of violence included in the plots of these programs. The analysis included in this article moves our knowledge about violence in prime time broadcast programs into the 21st century.

When compared with the findings from the National Television Violence project (1994-1997) for prime time programs, the data from this analysis show considerable congruency, both in terms of the prevalence of violence within the programs and the lack of context for violent actions. I would particularly direct your attention to Table 1 (p. 47) that shows trends in the percent of programs with violence and the average number of violent actions in each year included in the sample. Table 2 (p. 48) shows the percentages of programs with violence that was both an integral or minor part of the program.

The text and tables reported in the upcoming ABC-CLIO book update the Violence Profiles that had been published by the Cultural Indicators Research Team; the last published profile was in 1994 (see, Gerbner, G., Morgan, M., & Signorielli, N. (1994). *Television Violence Profile No. 16: The turning point from research to action*. Philadelphia, PA: The Annenberg School for Communication, University of Pennsylvania). The data used in this analysis span almost 40 years, gathered between 1967 and 2003, and come from two sources. First, the data generated by the Cultural Indicators Project (1967 to 1992) when it was located at the Annenberg School for Communication at the University of Pennsylvania. I am particularly indebted to Professor Gerbner and my other colleagues for the continued use of these data. Second, data collected at the University of Delaware between 1993 and 2003 (data in the JOBEM article). These data were collected as part of ongoing class research projects. Although the data were generated at two different venues they are comparable because the University of Delaware data collection procedures replicated the definitions and methods originally developed and used in the Cultural Indicators Project at the University of Pennsylvania. These tables provide interesting trend information comparing measures of television violence from the late 1960s to the early part of the 21st century. The analysis look at overall samples and also provide comparisons by

program genres (action adventure, reality, etc.) as well as comparisons for early (7 to 9 PM) and late (9 to 11 PM) programs.

Again, these tables show considerable consistency from decade to decade in the levels of violence and congruency with the findings of the NTVS. The percent of programs with violence was highest during the late 1960s and during the 1980s; it was lowest during the first four years of the 21st century (2000 to 2003). The rates per program and per hour show some fluctuation, although not statistically significant, by decade with the highest rate per program (R/P) in the most recent samples of programs (4.81 acts of violence per program). What has changed most dramatically, however, is the percentage of characters who are involved in violence with involvement decreasing considerably since the 1960s. Overall the differences in the Violence Index primarily reflect the trends in character's involvement, with the Index being at its lowest level in the most recent samples of programs.

Interestingly (see Tables 8 and 9), these analysis show that there is not much difference in the amount of violence in programs aired in the early or late evening hours. Early evening programs are not less violent than those seen later in the evening even though one might expect to find less violence in the early evening because more children, particularly young children, may be more likely to watch television in the early evening rather than in the hours later in the evening.

If you would like any further elaboration about these data or the research in which I have been actively involved during the past 40 years I can be reached most easily by e-mail (NancyS@udel.edu) or by phone (302-831-8022). I believe that this Notice of Inquiry is particularly important and hope that these data will help shed some light upon your inquiry.

Sincerely yours,

A handwritten signature in cursive script, reading "Nancy Signorielli".

Nancy Signorielli, Ph.D.
Professor

Prime-Time Violence 1993-2001: Has the Picture Really Changed?

Nancy Signorielli

Violence remained stable in prime-time network programs broadcast between the spring of 1993 and the fall of 2001 and similar to levels found in studies of the 1970s and 1980s. Violence appeared in 6 out of 10 programs, at a rate of 4.5 acts per program. Violence was context-free. There was little gratuitous or graphic violence, few characters were punished for their involvement in violence, and few overall consequences. The lack of context may teach that violence is "sanitary," not necessarily immoral, and that those who commit violence are not sorry for their actions, or punished for their transgressions.

Concerns about television violence have sparked intense debate since television's earliest days. There is general agreement that violence exists on television, but because of differences in the way violence is defined and measured, there is little agreement, and considerable controversy, about the degree or amount of violence (Signorielli, Gross, & Morgan, 1982; Signorielli, Gerbner, & Morgan, 1995; Lometti, 1995). The importance of the context in which violence on television is presented is a recent focus in this research (Kunkel et al., 1995; Smith et al., 1998). This analysis will update our knowledge of the portrayal of violence on television by examining week-long samples of prime-time network programming broadcast between the spring of 1993 and the fall of 2001, looking for change in the amount of violence as well as more information about the context of violence. This study provides an opportunity to replicate some of the work of both the Cultural Indicators Project and the National Television Violence Study (NTVS). The sample spans 9 years of prime-time broadcast programming and includes variables that permit comparisons with studies conducted during the past 30 years.

The Policy Perspective

In the past forty years, public concern about television violence has fluctuated, almost cyclically. For the ten years between 1968 and 1978, there was considerable public concern and numerous Congressional Hearings about the amount of violence on television. Most, if not all, of these hearings did not result in substantive action

(Hoerrner, 1999). Public debate subsided during the 1980s era of deregulation. Concern about television violence surfaced again in the early 1990s with the passing of the Television Violence Act (designed to protect the networks from antitrust action if they joined to talk about ways to reduce violence on television). Toward the end of 1992, when it appeared as though little had changed in regard to television violence, the close expiration date of the Television Violence Act prompted its author, Senator Paul Simon (Democrat-Illinois), to warn of harsher legislation. The result was a renewed promise by network executives that they would explore ways to reduce violence in prime time (Dustin, 1992). In 1993, for the first time since the late 1970s, Congressional hearings on television violence were held and a number of separate bills relating to television violence were introduced in Congress (Hoerrner, 1999). In response to Congressional concern, the television industry implemented parental "advisories" before those programs they designated as "violent."

These advisories, however, did not adequately solve the problem and an amendment was added to the Telecommunications Act of 1996 that mandated all television sets 13 inches or larger, manufactured after 1999, be equipped with the V-Chip, an electronic device that enables parents to screen and block the programs their children watch on television. The television industry was asked to develop a rating system to use with the V-Chip to filter violent and sexually explicit programming (FCC, 2000). The result was the implementation of ratings (TV-G, TV-PG, TV-PG14, and TV-M), similar to those used by the motion picture industry, supplemented by advisories for content (V-violence, S-sexual situations, D-suggestive dialogue, and L-language).

The Theoretical Perspective

Numerous theories explain why the study of television violence is important and how it may affect viewers, especially children. Desensitization (see Potter, 1999) and social learning-social cognitive theory (Bandura, 1986), for example, examine the immediate and typically harmful effects of viewing violence. Cultivation theory, on the other hand, looks at viewing violence from a cumulative, long-term perspective, involving three areas: institutional-policy perspectives, messages about violence on television, and, ultimately, effects.

Cultivation theory argues that to understand the effects of viewing on attitudes, beliefs, and behaviors we must examine television as a collective symbolic environment with an underlying formulaic structure (Gerbner, Gross, Morgan, Signorielli, & Shannahan, 2002). Commercial constraints necessitate that common themes cut across all programs. These, in turn, cultivate common world views and stereotypes. Violence is one such theme and is especially important in the cultivation perspective because people are more likely to experience violence when they watch television (whether in news or entertainment programs) than in real life. Consequently, cultivation theory predicts that people's conceptions about violence are more likely to reflect the messages about violence they see, day in and day out, on television.

Nancy Signorielli (Ph.D., University of Pennsylvania) is a Professor of Mass Communication at the University of Delaware. Her research interests include the content and effects of mass media, particularly television.

Cultivation research has found that those who watch more television are more likely to view the world as a mean and scary place, to believe that crime and violence are more prevalent than they actually are, and to take precautions to protect themselves, their homes, and their families against crime (Gerbner, Gross, Morgan & Signorielli, 1994).

Violence on Television

While there were some studies in the 1950s and 1960s, most of our knowledge of violence on television comes from the Cultural Indicators Project and the National Television Violence Study. The Cultural Indicators Project examines and measures the amount of physical violence on television by monitoring prime-time and weekend daytime network broadcast television programming and studied relationships between television viewing and conceptions of social reality (Gerbner, Morgan, & Signorielli, 1994; Gerbner, Gross, Morgan & Signorielli, 1980a, 1980b, 1986; Gerbner & Signorielli, 1990; Signorielli, 1990; Gerbner, et al., 2002), periodically publishing the results as the Violence Profile.

One report (Gerbner, Morgan, & Signorielli, 1994) found, for samples of prime-time programs broadcast between 1973 and the fall of 1992, that violence appeared in seven out of 10 programs at the rate of 5.3 incidents per hour and 4.6 incidents per program and that half of the major characters in these programs were involved in violence. Moreover, the figures reported for the samples broadcast during the early 1990s were under the Project's 25-year averages. In the sample of programs from the 1992-93 season, while 65.0% of prime-time fictional dramatic programs contained violence and 45.6% of the characters were involved in violence, the average frequency of violent acts was 2.9 per hour, about three-fifths of the 25-year average.

The National Television Violence Study (NTVS) (Wilson, Kunkel, Linz, Potter, Donnerstein, Smith, Blumenthal, & Gray, 1997, 1998; Smith, et al., 1998) examined physical violence in three yearly samples (1994-95, 1995-96, and 1996-97) of three composite weeks of programming across 23 channels operating between 6:00 a.m. and 11:00 p.m. each day. The sample ($N = 8,200$) included broadcast (commercial networks, independent stations, and public television) and cable channels (basic and premium offerings). All genres except game shows, religious programs, "infomercials" or home shopping channels, sports, instructional programs, and news were included (Smith, et al., 1998).

In all of the programming sampled, the NTVS found no change in the prevalence of violence from the 1994-95 to the 1996-97 television seasons; 58% of the programs in the 1994-95 sample, 61% of the programs in the 1995-96 sample, and 61% of the programs in the 1996-97 sample contained violence. There was, however, in prime time (8:00 p.m. to 11:00 p.m.) an 8% increase in the overall level of violence in cable and broadcast programs; 59% of the programs in the 1994-95 sample, 66% of the programs in the 1995-96 sample, and 67% of the programs in the 1996-97 sample contained violence. The largest increase from 1994-95 to 1996-97

(14%) was found for those programs broadcast on the commercial networks. Thus, in prime time, the time of day that draws the largest share of viewers, particularly on the commercial networks (ABC, CBS, NBC, and FOX), the percentage of programs with violence increased.

A more recent examination of the 1996-1997 NTVS data (Smith, Nathanson, & Wilson, 2002), found that the amount of violence in prime-time programs was similar to that found in programs aired during other times of the day. Violence was found in six out of ten programs and the rate of violent interactions in prime time was 6.63 per hour, compared to 6.40 per hour during other times of the day. This analysis found that 67% of broadcast network programs contained violence that appeared at a rate of 5.16 violent interactions per hour, figures similar to those for programs on basic cable. Premium cable programming, on the other hand, had the most violence—88% of the programs at a rate of 12.40 violent interactions per hour.

There have been two other studies of television violence in 1990s programming. An industry (ABC, CBS, NBC, and FOX) funded study (Cole, 1995, 1998) monitored at least four episodes of every prime-time and Saturday morning (7:00 a.m. to noon) network program in each of three seasons (1994-95, 1995-96, and 1996-97) and two weeks of programs on independent stations, public television, and pay cable. While this analysis did not provide overall measures of the level of violence, there was a drop, between 1994-95 and 1996-97, in the number of television series that raised frequent concerns about the way violence was presented. The only programs that raised more concerns at the end of this three-year period were reality shows (e.g., *World's Most Dangerous Animals* and *World's Scariest Police Chases*).

The Center for Media and Public Affairs (Lichter & Amundson, 1992) isolated physical violence on 10 channels (network, independent, and cable) during one day. Violence appeared most frequently during the afternoon (2 to 5 p.m.) with 191 acts per hour, early morning (6 to 9 a.m.) 158 acts per hour, and during prime time with 102 acts per hour. In an update, Lichter, Lichter, and Amundson (1999) isolated acts of violence in two randomly selected, constructed weeks of prime-time network and cable fictional programs ($N = 284$) and 50 movies on cable and broadcast television during the 1998-99 season. They found 12 acts of violence per episode (half were "serious") in broadcast programs and 10 per episode (half were "serious") in cable programs.

The data from these studies, particularly the Cultural Indicators Project in the early 1990s and the National Television Violence Study, are at odds with expectations given the posturing and promises made by network executives before, during, and after the 1993 round of congressional hearings (Hearings, 1993; Dustin, 1992). Consequently, this analysis will examine the level of violence in prime-time programs between the spring of 1993 and the fall of 2001.

RQ1: Has the amount of violence in samples of prime-time network programs broadcast decreased between the spring of 1993 and the fall of 2001?

The Context of Violence

A second area of interest is the context in which violence is presented within storylines. The Cultural Indicators Project examined humor and program genre in relation to violence. During the 1970s, slightly more than a quarter of prime-time programs were comic in nature and less than half (45.5%) included violence at a rate of 2.0 incidents per program and 3.6 incidents per hour. In addition, close to half of the network prime-time programs were action-adventures, an exceptionally violent genre, with 94.5% containing some violence at a rate of 7.8 incidents per program and 6.8 incidents per hour (Gerbner, Gross, Morgan, & Signorielli, 1980b). Similarly, Signorielli (1990) in an analysis through the fall 1985 sample, found that only one in five prime-time programs had humorous violence.

The National Television Violence Study advanced our understanding of the contextual elements in the portrayal of violence on television (Wilson, et al., 1997, 1998; Smith, et al., 1998). The NTVS examined the consequences of violence, whether or not humor was involved, the graphic nature of the violence, whether or not weapons were used, and the degree of realism. The analysis of data from the 1994-95 sample found that the context in which violence is presented poses risks for viewers (NTVS, 1994-1995). In particular, three-quarters of the violent scenes had unpunished perpetrators, negative consequences of violence were rarely presented, one-quarter of the violence incidents involved the use of a handgun, and less than one in 20 programs emphasized anti-violence themes. Yet, television violence was not particularly graphic. While the analysis found that broadcast network programs had less violence than cable channels, the context of violence on both broadcast and cable was similar.

The NTVS also examined year-to-year changes in the portrayal of the contextual elements of violence. Looking specifically at violent broadcast programming, only 35% of the prime-time programs in 1994-95, 23% of the programs in 1995-96, and 24% in 1996-97 had any long-term negative consequences of violence. At the same time, there was no display of remorse, regret, or sanctions in 6 out of 10 of the violent scenes in these samples. Similarly, while two-thirds of the violent interactions in the 1994-95 sample did not show any pain as a result of violence, this proportion dropped to slightly more than half of the violent interactions (54% in the 1995-96 sample and 53% in the 1996-97 sample). This analysis indicated that violence on television, examined at the program, scene, and interaction level, is antiseptic and devoid of pain and suffering. Interestingly, there were no substantial changes from year to year (Smith, et al., 1998).

Smith, et al., (2002) found that prime-time broadcast network programming and basic cable programming were less likely than premium cable programming to include violent interactions that depicted pain or harm. The violent interactions in premium cable programs also were more likely to show long-term consequences of violence than those in network broadcast programs or the basic cable programs.

Consequently, this analysis also shows that prime-time network broadcast programs are relatively devoid of pain and suffering.

Potter and Smith (2000), in an analysis of data from the 2nd year of the NTVS (1995-96), examined the context of graphic portrayals of violence. This analysis found that most violence presents a low level of graphicness and that the violence in fantasy programs rarely exhibits graphicness. High levels are only found in one out of ten violent actions. Moreover, it tends to be presented with a high degree of realism such as the violence seen in live action programs (recreated reality programs) with human targets and perpetrators. The use of guns and knives (shooting or stabbing a victim) is also related to higher levels of graphic violence.

Potter, et al.'s, (1995) analysis of a composite week (6 p.m. to midnight) of programs broadcast on ABC, CBS, FOX, and NBC in the spring of 1994, also found that aggressive acts were context-less; fewer than one in six acts had any major consequences, only one in six acts was punished, while one-third were actually rewarded. Although Potter and Ware (1987) found that only one in ten acts of violence was punished and that heroes and villains were equally likely to commit antisocial acts, violence, at least from the perspective of the perpetrator, was seen as justified. Similarly, Lichter, Lichter, and Amundson (1999) found that most television violence did not have either psychological or physical consequences and occurred in a moral vacuum because heroes typically saw the violence they committed as justified (in self-defense, in a law enforcement context, etc.).

Given the potential importance of contextual elements in conveying messages about violence in society, this study will continue the examination of the context in which violence is portrayed on television. It will explore the degree of humorous violence whose importance can be understood from the perspective of cultivation theory. While some of the earliest research in the observational learning/social cognitive perspective (Bandura, 1986, 1990; Bandura, Ross, & Ross, 1963, 1961), along with other early studies of symbolic aggression (Lovas, 1961), found that youngsters often learn and reproduce violent behaviors after seeing cartoon/humorous violence, cultivation theory posits that humorous violence is an effective way to convey lessons of power. Although comic violence may appear less threatening, the actions are often mean-spirited with few realistic consequences, a sure formula for influence. These lessons typically translate to conceptions of living in a mean and dangerous world and overestimating chances of being involved in violence by those who watch more television. Specifically, those who watch more television, compared to those who watch less, tend to believe that most people "cannot be trusted," that most people are "just looking out for themselves" and overestimate how many people are involved in violence and the number of people who are involved in crime detection and law enforcement (Gerbner, et al., 1980a, 1994; Signorielli, 1990).

Cultivation theory also explains the importance of the significance of violence reflected in the complex social scenario illustrated by the patterns of committing violence and victimization in characterizations as well as the frequency of violence in the program. These elements ultimately cultivate a sense of fear, intimidation, and

vulnerability reflected in the positive relationships between television viewing and scores on both the Mean World Index and the Index of Alienation and Gloom (Signorielli, 1990). In short, the more violence there is and the more important it is for the storyline, the more likely viewers believe that they live in a mean and dangerous world. Similarly, those who watch more television, particularly those who have been to college, are more likely to feel more bored, depressed, and lonely (Morgan, 1984).

The examination of graphic, immoral, intentional, and justified violence as well as the portrayal of the physical consequences of violence are also critical to the understanding of the context of television violence. Each of these elements is supported by several theories, including desensitization (Potter, 1999) and social learning/social cognitive theory (Bandura, 1986). Cultivation theory is also relevant because it explores how these elements relate to how different groups of viewers perceive their own vulnerability. Specifically, heavy viewers are more likely to believe they will be victims of violence and consequently more likely to buy more guns and locks as well as have watchdogs for protection (Gerbner, Gross, Signorielli, Morgan, & Jackson-Beeck, 1979).

In light of the above, this study will examine the context in which violence is portrayed, exploring humorous, significant, graphic, immoral, intentional, and justified violence as well as the physical consequences of violence. The analysis will also look for changes in contextual elements between the spring of 1993 and the fall of 2001 and how often multiple contexts of violence appear.

RQ2: What is the context of violence and have there been changes in the context of violence in samples of prime-time network programs broadcast between 1993 and 2001?

RQ3: How often does the storyline provide a context for violence and how many different contexts are seen within the same program?

The last area of focus for this analysis explores character involvement in violence. The cultivation perspective has shown that television violence illustrates and provides lessons about power. Violence shows who's on top and who's on the bottom, who gets hurt and who does the hurting. Studies have consistently found a demographic power structure, with women and minorities more likely to be hurt than to hurt others. Violence Profile No. 11 (Gerbner, et al., 1980a, 1980b), for example, found that between 1969 and 1979, 60% of the male major characters compared to 40% of the female major characters were involved in violence (either hurting others or being hurt themselves). Whites were more likely than minorities to be involved in violence; more than half of the minority men, compared to 60% of the white men and less than one-quarter of the minority women, compared to 40% of the white women either hurt others or were hurt themselves. During the 1970s these patterns favored victimization.

Gerbner, Morgan, and Signorielli (1994) found that, during the 1980s, male

characters were slightly less likely to be involved in violence than in the 1970s. More than half of the male characters (56%) in the 1980s, compared to 60% in the 1970s either hurt others or were hurt themselves. The percentage of women involved in violence, on the other hand, increased slightly during the 1980s. In the 1970s 40% of the women were involved in violence while 44% were involved during the 1980s. Once again, characters were somewhat more likely to be victimized than to hurt others.

While the National Television Violence Study (Smith, et al., 1998) did not generate a profile of all characters on television, it did examine the demographic makeup of perpetrators and targets of violence. Most of the perpetrators (close to three-quarters) were men while only one in ten was a woman. Few perpetrators were categorized as heroes and most were white. More than four out of ten (43%) were "bad" while more than a quarter (28%) were "good" and one in ten were both "good and bad." Similarly, most of the targets were men (71%) while only 10% were women and most were white. Potter, et al. (1995) also found that men were more likely than women to perpetuate aggressive acts, particularly those of a serious nature. They note, however, that these higher rates of aggression, and hence the unrealistic nature of the portrayals, are due to the overrepresentation of men on television (Signorielli & Bacue, 1999). Potter, et al. (1995) also found that the television world typically presents an unrealistic picture of serious aggression in regard to the race of those who commit the acts as well as those who are victimized. In short, television overrepresents both white perpetrators and white victims of aggression.

Although Potter, et al.'s (1995) research as well as the NTVS and the CI reports differ considerably in how they isolate characters' involvement in violence, the patterns are similar—more men than women and more whites than minorities. This study will extend the analysis of those involved in violence, examining if they remain at the high levels of the 1970s and 1980s and if those involved in violence are more likely to be men than women and/or whites than nonwhites.

The patterns of violence and victimization clearly demonstrate power and cultivation theory posits that these depictions serve to intimidate rather than incite and to paralyze rather than trigger action (Gerbner, 2002). Those who watch more tend to overestimate their chances of being involved in violence, believe that their neighborhoods are unsafe, and believe that crime is a very serious problem and is rising, despite data to the contrary (Gerbner, Gross, Morgan, & Signorielli, 1984). This leads to the last research question.

RQ4: What are the demographic and contextual patterns of characters' involvement in violence between the spring of 1993 and the fall of 2001?

Method

The study builds upon Cultural Indicators research on television violence. The sample consists of 13 weeks of prime-time¹ network dramatic programming, broad-

cast between the spring of 1993 and the fall of 2001. The sample has 1,127 programs and 4,885 major and supporting characters. The analysis examined prime-time network programs because, despite the proliferation of cable channels and other media outlets and their availability, network prime-time programs remain the most readily available to most viewers. Prime-time programs are consistently seen by at least half of the population (Nielsen, 2000). The samples were analyzed as part of an ongoing class project at an Eastern university. There were two samples in 1993, 1997, 1998, and 1999—one collected in the spring and one in the fall; the remaining years only sampled fall programming. The weeks sampled were not selected during a sweeps period and only network programming (ABC, CBS, NBC, FOX, UPN and WB²) was included. The samples were drawn around the same time each year; the fall samples in late September and early October and the winter/early spring samples in January and March (February was omitted because it is a sweeps month). Numerous tests to assess the validity of week-long samples have found that a week of programming gives a fairly accurate description while being cost and time effective (Signorielli, et al., 1982).

The coders were junior and senior communication majors.³ Their three-week training consisted of discussions to explain coding schemes as well as hands-on coding of programs that had been specifically selected and pre-coded for the training process. The recording instruments, although not identical, included many of the same variables. Those used in this study had identical coding schemes in each of the samples.

The television program and the major/supporting character were the units of analysis. The program unit consisted of television plays (sitcoms, dramas, and action programs), feature or made-for-television films, some animation (e.g., *The Simpsons*), reality, news/information, and award-type programs. The news/information and award programs were omitted from this analysis. The major/supporting characters were those roles essential to the story line; coders were instructed to include the character if their omission would have substantially changed the plot. All of the characters selected for coding were included in the sample.

The recording instruments isolated numerous dimensions of content. The definition of violence was that used in the Cultural Indicators Project: "The overt expression of physical force (with or without a weapon, against self or other) compelling action against one's will on pain of being hurt or killed, or actually hurting or killing" (Signorielli, et al., 1982, p. 163). To be coded, violence had to be plausible and credible; idle threats and verbal abuse were not coded. All acts of violence that fit the definition, regardless of conventional notions about types of violence that might have "serious" effects, were recorded. Violence in a humorous context was included. "Accidental" violence and "acts of nature" were also recorded because they are purposeful, claim victims, and demonstrate power. Coders counted all of the acts of violence (a scene of some violence confined to the same agents) within a program.

Context of Violence

The context of violence was examined from the perspective of the program and the character. There were eight variables describing the contexts in which violence was portrayed within the program's story line. The *seriousness* (or potential seriousness) of violence, isolated whether violence was always presented in a humorous/comic way, sometimes in a humorous way, or was mostly real, serious violence, even if in a cartoon or comedy. Humorous violence is included because humor is often an effective way to present serious lessons about violence in society (Gerbner, et al., 1980a). The *significance of violence* examined the importance of violence to the plot and main characters; violence was coded as not appearing, as minor or incidental to the plot, or significant to the plot. The *intentionality of violence* isolated whether the violence was mostly unintentional, both intentional and unintentional, or mostly intentional. Context variables at the program level also isolated the degree of *immoral*, *justified*, *gratuitous*, and *graphic* violence. *Immoral violence* was violence that was clearly and explicitly intended, within the story, to be seen as destructive, negative, or evil. *Justified violence* was violence that was clearly and explicitly intended, within the context of the story, to be seen as just or as a means to an end. *Gratuitous/excessive violence* was beyond that which would be essential to the plot. *Graphic violence* was descriptive, vivid, and/or gory in nature. Each of these four variables was coded using the following scheme: no violence in the program, no violence fitting the definition of intentional, immoral, justified, gratuitous, or graphic violence, and violence fitting the above definitions. The *physical consequences of violence* isolated whether or not viewers were shown the physical results/consequences of violence. Again, the coding scheme differentiated between having no violence at all, no violence with physical consequences, or if physical consequences were presented in the story line. In order to determine if contexts of violence were likely to occur within the same program, a summated measure of context was calculated by counting the number of separate contexts that appeared within each program. This measure had a high level of internal consistency (Cronbach's $\alpha = .94$). Most of the variables measuring the context of violence within the program are similar to variables used in other studies of television violence (Potter, 1999), including the National Television Violence Study (Smith, et al., 1998).

Last, characters in major and supporting roles were coded on a number of demographic (gender, race, etc.) and descriptive variables relating to their involvement in violence and the context of violence within their characterization. *Violence committed* (coded at the highest degree of behavior) examined whether the character did not commit violence, hurt others, or killed. Similarly, *victimization* (coded at the highest degree) determined if the character did not get hurt, was hurt, or was killed. Four variables were added in the fall of 1997 and examined the context in which

characters were involved in violence. *Consequences of violent behavior* isolated whether or not a character's violent behavior was rewarded or punished. The coding scheme included not engaging in violent behavior, violent behavior neither rewarded nor punished, violent behavior mostly rewarded, violent behavior mostly punished, or violent behavior both rewarded and punished. *Justified violence* was violence that was portrayed as just or as a means to an end. The scheme differentiated if the character did not engage in violent behavior, the violent behavior was not portrayed as justified, or the violent behavior was justified. *Immoral violence* was violence portrayed as immoral, destructive, negative, or evil, and each character was coded as committing no violent behavior, violent behavior that was not immoral, or violent behavior that was immoral. The recording instrument also examined the character's reaction to violence (whether or not the character exhibited remorse). This coding scheme differentiated characters by whether they did not engage in violent behavior, did not show remorse, or exhibited remorse. Again, Potter (1999) discusses most of these variables in relation to studies that measure the context of television violence.

Reliability and Data Analyses

Three-quarters or more of the programs in each of the samples were coded by two independent coders to provide a test of reliability. Roughly 80% of the characters in each sample were isolated by both coders. Reliability was measured for each variable in each sample by Krippendorff's (1980) alpha. The average value of alpha for the 13 samples was .95 for gender and .90 for race; the 13-sample average for the number of violent actions was .71, ranging from a low of .66 to a high of .87. The agreement coefficients for the program and character variables in each sample meet standards outlined by Krippendorff (1980); for simplicity, 13-sample averages are reported.⁴

Many of the data analyses are one-way analyses of variance in which the independent variable is the sample year and the dependent variable is the proportion of programs with the element being examined—for example, the proportion of programs with comic violence. These values, when presented in the text, are reported as percentages to simplify the discussion. Analyses reporting the average number of violent actions or the average number of contexts of violence also test for statistical significance with one-way analyses of variance in which the independent variable is the sample year and the dependent variable is the mean score (effect size = eta-squared). Tests for linear trends were conducted to determine if there were either increases or decreases in the presentation of violence on prime time during the 1990s. The analysis of data for characters does not look for year-to-year trends and uses a cross-tab format, with statistical significance tested by chi-square.

Results

The percentage of programs with violence remained stable between the spring of 1993 and the fall of 2001 (Table 1). Approximately 60% of the programs in each year have some violence, with the smallest percentages in the fall of 1995 (49.4%) and the fall of 1999 (48.9%) and the largest in the fall of 1994 (77.2%). Also, from the spring of 1993 to the fall of 2001, the number of violent actions ranged from a low of 3.06 per program to a high of 8.20 per program. The analysis of variance shows a statistically significant difference from year to year in the average number of violent actions ($F = 2.36$, $df = 12,1116$, $p < .01$; $\text{Eta-Sq} = .025$) along with a significant linear trend ($F = 2.11$, $df = 11,1116$; $p < .05$). This finding, however, is due to the spike in violent actions in the fall 1999 sample (8.20 per program). The results of the Duncan Multiple Range Test indicate that the average number of violent actions in the fall of 1999 is significantly different from the average in each of the other samples except for the spring of 1997. There are no statistical differences between the other sample means. This spike is due to three reality programs with excessive numbers of violent actions; if these three programs are removed from the analysis there are no differences between the samples ($F = 1.31$, $df = 12,1113$, ns; $\text{Eta-sq} = .014$), no linear trend ($F = 1.20$, $df = 11,1113$, ns), and the average number of violent actions for the fall 1999 sample drops to 5.60 ($SD = 9.20$). Consequently, it is prudent to conclude that the amount of violence in the 1990s through the fall of 2001 has not

Table 1
Average Number of Violent Actions (VA) and Percent of Programs with Violence (%V) from Spring 1993 to Fall 2001

| Sample Year | N of Programs | Avg. N of VA | SD | % V |
|-------------|---------------|--------------|-------|------|
| 1993 Spring | 79 | 3.48 | 6.24 | 63.3 |
| 1993 Fall | 76 | 4.05 | 7.39 | 59.2 |
| 1994 Fall | 79 | 4.48 | 7.87 | 77.2 |
| 1995 Fall | 85 | 3.06 | 5.34 | 49.4 |
| 1996 Fall | 78 | 4.65 | 7.60 | 65.4 |
| 1997 Spring | 76 | 5.71 | 7.80 | 68.4 |
| 1997 Fall | 110 | 3.29 | 5.66 | 56.9 |
| 1998 Spring | 81 | 4.67 | 8.42 | 56.8 |
| 1998 Fall | 90 | 3.66 | 6.27 | 66.7 |
| 1999 Spring | 90 | 3.26 | 5.81 | 48.9 |
| 1999 Fall | 96 | 8.20 | 17.25 | 69.8 |
| 2000 Fall | 88 | 5.45 | 10.81 | 53.4 |
| 2001 Fall | 100 | 4.82 | 8.86 | 63.0 |
| Total | 1,127 | 4.53 | 8.81 | 61.2 |

increased or undergone any major changes. Violence appears in six out ten programs and with four to five acts of violence per program.

RQ2 asks about the context of violence and if there have been changes during the 1990s. One element of the context of television violence is how important (significant) violence is to the plot. Table 2 shows that violence was a significant or major element of the plot in one-third of the programs and a minor element is slightly more than a quarter of the programs. Once again, these distributions were fairly stable through the 1990s.

Another element of context is whether or not violence is presented as a serious or comic plot element. In these samples of prime-time network broadcasting, more than four out of ten programs have violence that is serious in nature while less than a quarter of the programs have violence that is humorous or somewhat humorous. The data in Table 3 indicate that these percentages were stable during the 1990s. One-way analyses of variance for humorous violence ($F = 1.66$, $df = 12,1116$, ns; $Eta-sq = .018$) and serious violence ($F = 1.06$, $df = 12,1116$, ns; $Eta-sq = .011$) were not statistically significant.

As can be seen in Table 4, the majority of the programs do not show many contextual elements for the violence. The context that appeared most frequently was intentional violence in four out of ten programs. Gratuitous and graphic violence each appeared in about a quarter of the programs, while justified violence, immoral violence, and showing the consequences of violence were found in about a third of the programs.

Table 2
Significance of Violence from Spring 1993 to Fall 2001

| Sample | No Violence Row % | Minor Violence Row % | Major Violence Row % | N of Programs N |
|-------------|----------------------|-------------------------|-------------------------|--------------------|
| 1993 Spring | 36.7 | 31.6 | 31.6 | 79 |
| 1993 Fall | 40.8 | 23.7 | 35.5 | 76 |
| 1994 Fall | 22.8 | 40.5 | 36.7 | 79 |
| 1995 Fall | 50.6 | 22.4 | 27.1 | 85 |
| 1996 Fall | 34.6 | 35.9 | 29.5 | 78 |
| 1997 Spring | 31.6 | 25.0 | 43.4 | 76 |
| 1997 Fall | 43.1 | 30.3 | 26.6 | 110 |
| 1998 Spring | 43.2 | 30.9 | 25.9 | 81 |
| 1998 Fall | 33.3 | 32.2 | 34.4 | 90 |
| 1999 Spring | 51.1 | 21.1 | 27.8 | 90 |
| 1999 Fall | 30.2 | 26.0 | 43.8 | 96 |
| 2000 Fall | 46.6 | 19.3 | 34.1 | 88 |
| 2001 Fall | 37.0 | 29.0 | 34.0 | 100 |
| Total | 38.8 | 29.0 | 34.0 | 1127 |

$\chi^2 = 42.46$, $df = 24$, $p < .01$; $V = .137$, $p < .01$

Table 3
Humorous and Serious Violence in Prime Time Programs
from Spring 1993 to Fall 2001

| Sample | None Row % | Comic Row % | Mixed Row % | Serious Row % | N of Programs N |
|-------------|---------------|----------------|----------------|------------------|--------------------|
| 1993 Spring | 35.4 | 22.8 | 3.8 | 38.0 | 79 |
| 1993 Fall | 40.8 | 15.8 | 3.9 | 39.5 | 76 |
| 1994 Fall | 22.8 | 25.3 | 7.6 | 44.3 | 79 |
| 1995 Fall | 48.2 | 17.6 | 3.5 | 30.6 | 85 |
| 1996 Fall | 33.3 | 25.6 | 3.8 | 37.2 | 78 |
| 1997 Spring | 31.6 | 22.4 | 3.9 | 42.1 | 110 |
| 1997 Fall | 42.7 | 18.2 | 8.2 | 30.9 | 81 |
| 1998 Spring | 44.4 | 21.0 | 6.2 | 28.4 | 90 |
| 1998 Fall | 33.3 | 25.6 | 4.4 | 36.7 | 90 |
| 1999 Spring | 51.1 | 11.1 | 5.6 | 32.2 | 90 |
| 1999 Fall | 30.2 | 16.7 | 10.4 | 42.7 | 96 |
| 2000 Fall | 46.6 | 4.5 | 6.8 | 42.0 | 88 |
| 2001 Fall | 36.6 | 14.9 | 6.9 | 41.6 | 100 |
| Total | 38.4 | 18.3 | 5.9 | 37.3 | 1128 |

$\chi^2 = 55.64$, $df = 36$, $p < .02$; $V = .128$, $p < .02$

The one-way analyses of variance examining differences by sample year in the degree of immoral ($F = 1.15$, $df = 12,1116$; $Eta-sq = .012$), gratuitous ($F = 1.37$, $df = 12,1116$; $Eta-sq = .015$), and intentional violence ($F = 1.74$, $df = 8,801$; $Eta-sq = .017$) were not statistically significant. There were, however, significant year-to-year differences and linear trends for the consequences of violence, graphic and justified violence. For the consequences of violence ($F = 2.94$, $df = 11,1038$, $p < .001$; $Eta-sq = .030$) the differences were found primarily in three sample years: the fall of 1995 when only 18.8% of the programs showed any consequences of violence, the fall of 1994 when only 24.1% of the programs had consequences, and the fall of 1999 when almost half (49%) of the programs showed the consequences of violence. The pattern for the data in Table 4 for this variable indicates an increase in the percentage of programs showing the consequences of violence from the mid-1990s to the end of the 1990s, with a leveling off in the fall of 2000 and 2001. The percentage of programs with graphic violence also increased from the mid-1990s to the end of the decade. The year-to-year differences were statistically significant ($F = 3.98$, $df = 10, 963$, $p < .01$; $Eta-sq = .040$) and there was a significant linear trend ($F = 2.39$, $df = 9,963$, $p < .01$). The analysis for justified violence was barely significant ($F = 1.81$, $df = 12,1116$, $p < .05$; $Eta-sq = .019$) and there was no linear trend. Justified violence was least likely to be found in the fall of 1995 (25.9%) and the fall of 1997 (25.5%) and found most often in the fall of 1996, the fall of 1999, and the fall of 2001.

Table 4
Context of Violence in Prime Time Network Programs
from Spring 1993 to Fall 2001

| Sample | Immoral Row % | Gratuitous Row % | Graphic Row % | Intention Row % | Justified Row % | Conseq Row % | None R% | Total Programs |
|-------------|------------------|---------------------|------------------|--------------------|--------------------|-----------------|------------|-------------------|
| 1993 Spring | 25.3 | 16.5 | N/A | N/A | 36.7 | N/A | 49.4 | 79 |
| 1993 Fall | 31.6 | 25.0 | N/A | N/A | 30.3 | 31.6 | 46.1 | 76 |
| 1994 Fall | 34.2 | 19.0 | 19.0 | N/A | 30.4 | 24.1 | 45.6 | 79 |
| 1995 Fall | 25.9 | 24.7 | 16.5 | N/A | 25.9 | 18.8 | 54.1 | 85 |
| 1996 Fall | 37.2 | 20.5 | 21.8 | 41.0 | 42.3 | 43.6 | 37.2 | 78 |
| 1997 Spring | 42.1 | 34.2 | 28.9 | 51.3 | 40.8 | 46.1 | 40.8 | 76 |
| 1997 Fall | 30.9 | 17.3 | 16.4 | 38.2 | 25.5 | 32.7 | 46.6 | 109 |
| 1998 Spring | 27.2 | 28.4 | 14.8 | 30.9 | 32.1 | 30.9 | 46.9 | 81 |
| 1998 Fall | 24.4 | 25.6 | 21.1 | 48.9 | 38.9 | 36.7 | 40.0 | 90 |
| 1999 Spring | 32.2 | 26.7 | 21.1 | 34.4 | 26.7 | 40.0 | 51.1 | 90 |
| 1999 Fall | 42.7 | 31.3 | 41.7 | 37.5 | 43.8 | 49.0 | 31.3 | 96 |
| 2000 Fall | 36.4 | 20.5 | 33.0 | 40.9 | 36.4 | 35.2 | 48.9 | 88 |
| 2001 Fall | 35.6 | 27.7 | 34.7 | 48.5 | 42.6 | 40.6 | 38.6 | 100 |
| Total | 33.6 | 24.4 | 24.6 | 41.2 | 34.7 | 35.9 | 44.2 | 1128 |

Immoral: $\chi^2 = 49.02$, $df = 24$, $p < .002$, $V = .147$, $p < .001$

Gratuitous: $\chi^2 = 54.21$, $df = 24$, $p < .001$, $V = .155$, $p < .001$

Graphic: $\chi^2 = 76.45$, $df = 20$, $p < .001$, $V = .198$, $p < .001$

Intentional: $\chi^2 = 44.60$, $df = 16$, $p < .01$, $V = .135$, $p < .01$

Justified: $\chi^2 = 54.34$, $df = 24$, $p < .001$, $V = .155$, $p < .001$

Consequences: $\chi^2 = 77.94$, $df = 22$, $p < .001$, $V = .193$, $p < .001$

The summated measure of the context of violence found that 44.2% of the programs presented no context for the violence (Table 4). More than half of the programs in the fall of 1995, the spring of 1998, and the spring of 1999 samples did not have any context of violence while the sample from the fall of 1999 had the largest percentage of programs with a context for the violence. Interestingly, this was the sample with the highest number of violent incidents. Table 5 shows the average number of contexts for each year for the entire sample as well as only those programs with violence ($N = 690$). This analysis found, in programs with violence, that the average number of contexts per program was 2.88, ranging from 1.24 in the spring of 1993 to 3.78 in the fall of 2000. The differences from year to year were statistically significant ($F = 13.93$, $df = 12,676$, $p < .001$; Eta-sq = .198), with a statistically significant linear trend ($F = 3.60$, $df = 11,679$, $p < .001$). In the entire sample, there were, on average, 1.76 contexts per program, again with year to year statistically significant differences ($F = 6.46$, $df = 12,1116$, $p < .001$ Eta-sq = .065) and a significant linear trend ($F = 2.75$, $df = 11,1116$, $p < .01$). In general, these analyses show that the number of violent contexts increased during the 1990's.

Tables 6 and 7 provide the data to answer RQ4: What are the patterns of the

Table 5
Average Number of Contexts per Program from Spring 1993 to Fall 2001

| Sample | All Programs | | | Programs With Violence | | |
|-------------|--------------|------|------|------------------------|------|------|
| | N | Mean | SD | N | Mean | SD |
| 1993 Spring | 79 | 0.78 | 0.89 | 50 | 1.24 | 0.82 |
| 1993 Fall | 76 | 1.18 | 1.39 | 45 | 2.00 | 1.28 |
| 1994 Fall | 79 | 1.27 | 1.56 | 61 | 1.64 | 1.59 |
| 1995 Fall | 85 | 1.12 | 1.52 | 42 | 2.21 | 1.49 |
| 1996 Fall | 78 | 2.06 | 2.03 | 51 | 3.16 | 1.69 |
| 1997 Spring | 76 | 2.43 | 2.37 | 52 | 3.56 | 2.06 |
| 1997 Fall | 110 | 1.61 | 1.82 | 62 | 2.82 | 1.55 |
| 1998 Spring | 81 | 1.64 | 2.11 | 46 | 2.89 | 2.05 |
| 1998 Fall | 90 | 2.06 | 1.87 | 60 | 3.08 | 1.44 |
| 1999 Spring | 90 | 1.81 | 2.22 | 44 | 3.70 | 1.75 |
| 1999 Fall | 96 | 2.46 | 2.12 | 67 | 3.52 | 1.64 |
| 2000 Fall | 88 | 2.02 | 2.24 | 47 | 3.78 | 1.63 |
| 2001 Fall | 100 | 2.30 | 2.26 | 63 | 3.65 | 1.79 |
| Total | 1,128 | 1.76 | 1.99 | 690 | 2.88 | 1.80 |

characters' involvement in violence during the 1990s? This analysis does not break out the data by sample year but looks at overall differences between men and women, and whites and minorities. Table 6 examines the patterns of committing violence and being victimized. Only one-third of all the characters are involved in violence, either by hurting or killing others or being hurt or killed themselves. While more men than women are so involved—38.0% of the men compared to 27.3% of the women ($\chi^2 = 60.40$, $df = 1$, $p < .001$; $V = .111$, $p < .001$), the proportions of whites and minorities are almost equal ($\chi^2 = 2.80$, $df = 1$, ns; $V = .024$, ns). Men are more likely to both commit violence and to be victimized: 27.5% of the men commit violence compared to 19.0% of the women ($\chi^2 = 54.11$, $df = 2$, $p < .001$; $V = .05$, $p < .001$) and 27.0% of the men are victimized compared to 17.4% of the women ($\chi^2 = 62.88$, $df = 2$, $p < .001$; $V = .11$, $p < .001$). Again, there are no differences in the percent of whites and minorities who commit violence or who are victimized. Interestingly, during the 1990s the ratios of hurting to being hurt changed from the patterns seen in the 1970s and through the mid-1980s (Signorielli, 1990) for women but not for men. Today, for every 10 male characters who hurt or kill, 11 are victimized—the same ratio found in the earlier analysis. For women, however, instead of 16 women being victimized for each woman who hurts or kills, the odds are even: women are equally likely to hurt or kill as be hurt or killed. Interestingly, while whites are a little more likely to be victimized than hurt others, minority characters are just as likely to hurt/kill others as be hurt/killed themselves.

Table 6
Patterns of Committing Violence and Being Victimized in Prime Time Programs
from Spring 1993 to Fall 2001

| | Men | | Women | | Whites | | Minorities | | Total |
|---------------|------|------|-------|------|--------|------|------------|------|-------|
| | R% | C% | R% | C% | R% | C% | R% | C% | C% |
| Total N = | 2859 | | 2026 | | 3953 | | 889 | | 4885 |
| Violence | | | | | | | | | |
| Not Commit | 55.7 | 72.6 | 44.3 | 81.1 | 82.0 | 76.5 | 18.0 | 74.7 | 76.1 |
| Hurts others | 65.0 | 20.8 | 35.0 | 15.7 | 79.8 | 18.1 | 20.2 | 20.5 | 18.6 |
| Kills | 74.2 | 6.7 | 25.8 | 3.3 | 83.1 | 5.3 | 16.9 | 4.8 | 5.3 |
| Victimization | | | | | | | | | |
| Not Hurt | 55.4 | 73.0 | 44.6 | 82.6 | 81.7 | 77.1 | 18.3 | 76.8 | 77.0 |
| Gets Hurt | 67.7 | 23.3 | 32.3 | 15.6 | 81.9 | 20.1 | 18.1 | 19.8 | 20.1 |
| Is Killed | 73.9 | 3.7 | 26.1 | 1.8 | 78.4 | 2.8 | 21.6 | 3.4 | 2.9 |
| Involved Viol | | | | | | | | | |
| Not Involved | 54.6 | 62.0 | 45.4 | 72.7 | 81.9 | 66.7 | 18.1 | 65.8 | 66.5 |
| Involved | 66.2 | 38.0 | 33.4 | 27.3 | 81.2 | 33.3 | 18.8 | 34.2 | 33.5 |
| Involved Kill | | | | | | | | | |
| Not Involved | 57.5 | 91.4 | 42.5 | 95.3 | 81.7 | 93.1 | 18.3 | 93.0 | 93.0 |
| Involved | 71.9 | 8.6 | 26.1 | 4.7 | 81.6 | 6.8 | 18.4 | 7.0 | 7.0 |

R% = Row Percentages; C% = Column Percentages

Violence: Gender: $\chi^2 = 54.11$, $df = 2$, $p < .001$, $V = .105$, $p < .001$; Race: $\chi^2 = 2.80$, $df = 2$, ns, $V = .024$, ns

Victim: Gender: $\chi^2 = 62.88$, $df = 2$, $p < .001$, $V = .114$, $p < .001$; Race: $\chi^2 = 1.02$, $df = 2$, ns, $V = .014$, ns

Involved: Gender: $\chi^2 = 60.40$, $df = 1$, $p < .001$, $V = .111$, $p < .001$; Race: $\chi^2 = 0.29$, $df = 1$, ns, $V = .008$, ns

Killing: Gender: $\chi^2 = 27.22$, $df = 1$, $p < .001$, $V = .075$, $p < .001$; Race: $\chi^2 = 0.01$, $df = 1$, ns, $V = .001$, ns

The analysis shows that there is not much information about the context in which characters commit violence (see Table 7). Only 12.9% of the men, 5.3% of the women, 9.4% of the whites, and 9.4% of the minorities who commit violence are either rewarded and/or punished for their behaviors. Similarly, 14.3% of the men, 11.1% of the women, 13.0% of the whites, and 12.5% of the minorities are presented as committing violence that is justified. Remorse is rarely found, exhibited by only 3.8% of the men, 3.3% of the women, 3.4% of the whites, and 4.4% of the minorities. And finally only 9.4% of the men, 4.6% of the women, 7.4% of the whites, and 6.8% of the minorities are portrayed as having committed immoral violence. Overall, gender differences were statistically significant but race differences were not.

Table 7
Context in which Characters are Involved in Violence in Prime Time Programs
from Spring 1993 to Fall 2001

| | Men | | Women | | Whites | | Minorities | | Total |
|---------------|------|------|-------|------|--------|------|------------|------|-------|
| | R% | C% | R% | C% | R% | C% | R% | C% | C% |
| Total N = | 1620 | | 1162 | | 2216 | | 543 | | 2782 |
| Consequences | | | | | | | | | |
| No violence | 55.1 | 71.6 | 44.9 | 81.2 | 80.2 | 75.7 | 19.8 | 76.4 | 75.6 |
| No conseq | 61.6 | 15.6 | 38.4 | 13.5 | 81.0 | 14.8 | 19.0 | 14.2 | 14.7 |
| Rewarded | 74.2 | 4.3 | 25.8 | 2.1 | 84.8 | 3.5 | 15.2 | 2.6 | 3.3 |
| Punished | 81.2 | 6.7 | 18.8 | 2.2 | 80.5 | 4.6 | 19.5 | 4.6 | 4.8 |
| Both | 72.1 | 1.9 | 27.9 | 1.0 | 70.7 | 1.3 | 29.3 | 2.2 | 1.5 |
| Justification | | | | | | | | | |
| None given | 55.2 | 71.7 | 44.8 | 81.2 | 80.1 | 85.7 | 19.9 | 76.8 | 75.7 |
| Not justified | 71.9 | 14.1 | 28.1 | 7.7 | 81.2 | 11.3 | 18.8 | 10.7 | 11.4 |
| Justified | 64.2 | 14.3 | 35.8 | 11.1 | 80.9 | 13.0 | 19.1 | 12.5 | 12.9 |
| Morality | | | | | | | | | |
| None | 58.2 | 71.8 | 44.8 | 81.3 | 80.2 | 75.9 | 19.8 | 76.6 | 75.8 |
| Not | 65.2 | 18.8 | 34.8 | 14.0 | 80.5 | 16.7 | 19.5 | 16.6 | 16.8 |
| immoral | | | | | | | | | |
| Immoral | 73.7 | 9.4 | 26.3 | 4.6 | 81.6 | 7.4 | 18.4 | 6.8 | 7.4 |
| Remorse | | | | | | | | | |
| None | 55.1 | 71.6 | 44.9 | 81.2 | 80.1 | 75.1 | 19.9 | 76.6 | 75.6 |
| No remorse | 68.9 | 24.6 | 31.1 | 15.5 | 81.8 | 20.9 | 18.2 | 19.0 | 20.8 |
| Remorse | 62.0 | 3.8 | 38.0 | 3.3 | 75.8 | 3.4 | 24.2 | 4.4 | 3.6 |

R% = Row Percentages; C% = Column Percentages

Consequences: Gender: $\chi^2 = 52.22$, $df = 4$, $p < .001$, $V = .137$, $p < .001$; Race: $\chi^2 = 3.69$, $df = 4$, ns, $V = .037$, ns

Justification: Gender: $\chi^2 = 37.80$, $df = 2$, $p < .001$, $V = .117$, $p < .001$; Race: $\chi^2 = 0.31$, $df = 2$, ns, $V = .011$, ns

Morality: Gender: $\chi^2 = 36.16$, $df = 2$, $p < .001$, $V = .117$, $p < .001$; Race: $\chi^2 = 0.25$, $df = 2$, ns, $V = .009$, ns

Remorse: Gender: $\chi^2 = 35.83$, $df = 2$, $p < .001$, $V = .114$, $p < .001$; Race: $\chi^2 = 2.18$, $df = 2$, ns, $V = .028$, ns

Discussion

The overall level of violence did not change between the spring of 1993 and the fall of 2001—six out of 10 network prime-time programs contain some violence. Although there were fewer acts of violence per program in the early 1990s, by the fall of 2001 violence had increased to the levels consistently found in the 1970s and the 1980s (Gerbner, et al., 1980a, 1980b, 1994; Gerbner & Signorielli, 1990). These findings also substantiate analyses of programming in the 1990s (Smith, et al., 1998,

2002; Lichter & Amundson, 1994). In short, for the past 30-plus years violence was found in 60% of prime-time network programs at a rate of 4.5 acts per program. Television violence is a pervasive thematic element. Thus, whether a light, moderate, or heavy viewer, most people encounter some violence when watching. From the standpoint of observational learning/social cognitive theory, the pervasiveness of violence on television may translate to the acceptance and/or implementation of violent solutions to problems, while from a cultivation theory perspective, the steady diet of television violence may increase viewers' conceptions of a mean world and/or alienation and gloom.

This analysis isolated one important difference between the portrayal of violence in the 1970s and 1980s, compared to the 1990s and early 2000s—the involvement of fewer characters. In the 1970s and 1980s Gerbner, et al. (1980a, 1980b, 1986, 1994) consistently found about half of the major characters either hurt/killed others or were hurt/killed. During the 1990s, however, involvement dropped to one-third. Now the same amount of violence is committed by fewer characters who are essential to the story line.

Nevertheless, demographic differences remain. In the 1990s more whites than minorities committed violence or were victimized. These differences occur, however, because television programs have more white than minority characters. Similarly, more men than women are involved in violence, again because men consistently outnumber women on prime time (Signorielli & Bacue, 1999). Within-gender and within-race distributions show that the proportion of men involved in violence (about 4 in 10) is considerably larger than the proportion of women involved in violence (about 1 in 4). In addition, the patterns of committing violence and victimization still favor men over women. More men are likely to hurt or kill others (about a quarter) and to be hurt or killed themselves (also a quarter). Less than one in five women, on the other hand, harm others or are harmed themselves. Moreover, the same proportion of whites and minorities were involved in violence—roughly one in three. The findings for the gender distributions are similar to those of the NTVS (Smith, et al., 1998) but smaller than Gerbner, et al.'s (1980a, 1980b, 1986, 1994) studies in the 1970s and 1980s. Thus, while gender differences remain, racial differences are smaller.

This analysis also corroborates the finding of the NTVS (Smith, et al., 1998) that violence is context-less and that most programs do not show any long-term consequences of violence, remorse, regret, or sanctions. Throughout the 1990s, almost half of the programs did not include any contextual elements of violence—physical consequences rarely appeared, violence was rarely seen as justified or immoral, and only one in four programs included intentional violence. On a more positive note, perhaps, fewer programs displayed violence that was gratuitous or graphic. But, few characters were punished for their involvement in violence. Fewer programs with gratuitous violence may be a positive factor in that violence is presented as a necessary plot element. Less graphic violence also reduces the amount of visual gore which may, in turn, reduce the degree of realism. But this may be a double-edged

sword because realism is related to the development of schemas supporting aggressive behavior (Potter, 1999). Less realism, thus, could translate to more aggressive behavior.

Similarly, television today may not adequately support or reinforce the lesson that "crime does not pay." Indeed, the lack of an adequate context for violent behaviors on television may transmit the lesson that violence is "sanitary," is not necessarily immoral, and that those characters who commit violence are not typically sorry for their actions, and may not be punished for their transgressions. In short, there are few, if any, consequences for committing violence. From a social learning perspective these messages could result in viewers being more likely to learn and even accept aggressive behaviors. Thus, the environment of violent entertainment in which many people, particularly children, spend most of their free time may be potentially harmful for viewers (Smith, et al., 1998). Moreover, as Potter, et al. (1995) concluded, television's lack of realistic contexts for violence may signal that aggression and violence are acceptable. Thus, as many studies have shown, there are long-term causative effects of watching television violence that ultimately lead to a vicious cycle. Eron (1982), for example, has postulated that viewing leads to aggressive behavior and those who are more aggressive typically watch more violence.

Finally, as cultivation theory postulates, the ultimate long-term effects of watching television violence may pose threats for civil liberties and freedom. Cultivation studies have found that those who watch more television, compared to those who watch less, are more likely to overestimate their chances of being involved in violence, believe that fear of crime is an important personal problem, and assume that crime is rising. Those who spend more time watching television tend to believe that they are living in a mean and dangerous world as well as express feelings of alienation and gloom (Gerbner, et al., 2002; Signorielli, 1990). The problem is that violent images are almost impossible to avoid and, as a result, those who watch more television may become more fearful and alienated and may express sentiments of dependency and be willing to accept deceptively simple, strong, and hard-line political and religious positions if these beliefs seem to promise to relieve existing insecurities and anxieties. From the perspective of cultivation theory, the overall long-term effects of television violence may be the ready acceptance of repressive political and social environments that could translate into a loss of personal liberties.

Notes

¹ Prime-time programs were those broadcast between 8 p.m. and 11 p.m. on Monday through Saturday and between 7 p.m. and 11 p.m. on Sunday.

² WB and UPN were added in the 1997 sample of fall programming.

³ There were 13 different sets of coders who were predominantly white and middle-class; between two-thirds and three-quarters of the coders for each sample were women.

⁴ Average values of alpha for program variables: number of violent actions (.72), seriousness of violence (.72), significance of violence (.69), intentionality of violence (.61), immoral

violence (.69), justified violence (.66), gratuitous violence (.60), graphic violence (.67), and physical consequences of violence (.68). Average values of alpha for the character variables: gender (.95), race (.90), committing violence (.71), victimization (.66), physical consequences of violence (.73), justified violence (.71), immoral violence (.70), and reaction to violence (.68). While most of the variables exhibit robust reliability, some of the contextual elements were more difficult to isolate; these results should be viewed with some caution.

References

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1990). Selective activation and disengagement of moral control. *Journal of Social Issues*, 46, 27-46.
- Bandura, A., Ross, D., & Ross, S. A. (1961). Transmission of aggression through imitation of aggressive models. *Journal of Abnormal and Social Psychology*, 63, 575-582.
- Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive models. *Journal of Abnormal and Social Psychology*, 66, 3-11.
- Cole, J. (1995). The UCLA television violence monitoring report. Los Angeles, CA: UCLA Center for Communication Policy.
- Cole, J. (1998). The UCLA television violence monitoring report, year 3. Los Angeles, CA: UCLA Center for Communication Policy.
- Dustin, D. (1992, Dec. 12). 3 networks agree to standards governing violence on television. *Philadelphia Inquirer*.
- Eron, L. D. (1982). Parent-child interaction, television violence and aggression of children. *American Psychologist*, 37, 197-211.
- Federal Communications Commission (FCC). (Sept. 15, 2000). Viewing television responsibly: The V-Chip. V-Chip Homepage (<http://www.fcc.gov/vchip/>).
- Gerbner, G. (2002). Mass media and dissent. In M. Morgan (Ed.), *Against the Mainstream: The selected works of George Gerbner* (pp. 479-481). New York: Peter Lang Publishers.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1980a). The "mainstreaming" of America: Violence profile no. 11. *Journal of Communication*, 30(3), 10-29.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1980b). Violence profile no. 11: Trends in network television drama and viewer conceptions of social reality, 1967-1979. Philadelphia, PA: The Annenberg School for Communication.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1984). Political correlates of television viewing. *Public Opinion Quarterly*, 48(1), 283-300.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1986). *Television's mean world: Violence profile no. 14-15*. Philadelphia, PA: The Annenberg School for Communication.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1994). Growing up with television: The cultivation perspective. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 17-42). Hillsdale, NJ: Erlbaum.
- Gerbner, G., Gross, L., Morgan, M., Signorielli, N., & Shanahan, J. (2002). Growing up with television: The cultivation perspective. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 43-68). Hillsdale, NJ: Erlbaum.
- Gerbner, G., Gross, L., Signorielli, N., Morgan, M., & Jackson-Beeck, M. (1979). The demonstration of power: Violence profile no. 10. *Journal of Communication*, 29(3), 177-196.
- Gerbner, G., Morgan, M., & Signorielli, N. (1994). *Television violence profile No. 14: The turning point*. Philadelphia, PA: The Annenberg School for Communication.
- Gerbner, G., & Signorielli, N. (1990). *Violence profile 1967 through 1988-89: Enduring patterns*. Department of Communication, University of Delaware, Newark, DE.
- Hearings before the Subcommittee on Telecommunications and Finance (1993). *Violence on television*. Washington, DC: Government Printing Office.
- Hoerner, K. L. (1999). Symbolic politics: Congressional interest in television violence from 1950 to 1996. *Journalism and Mass Communication Quarterly*, 76(4), 684-698.
- Krippendorff, K. (1980). *Content analysis*. Beverly Hills, CA: Sage.
- Kunkel, D., Wilson, B., Donnerstein, E., Linz, D., Smith, S., Gray, T., Blumenthal, E., & Potter, W. J. (1995). Measuring television violence: The importance of context. *Journal of Broadcasting & Electronic Media*, 39(2), 284-291.
- Lichter, S. R., & Amundson, D. (1992). *A day of television violence*. Washington, DC: Center for Media and Public Affairs.
- Lichter, S. R., & Amundson, D. (1994). *A day of television violence: 1992 vs. 1994*. Washington, DC: Center for Media and Public Affairs.
- Lichter, S. R., Lichter, L. S., & Amundson, D. R. (1999). *Merchandizing Mayhem: Violence in popular entertainment 1998-99*. Washington, DC: Center for Media and Public Affairs.
- Lometti, G. E. (1995). The measurement of televised violence. *Journal of Broadcasting & Electronic Media*, 39, 292-295.
- Lovas, O. I. (1961). Effects of exposure to symbolic aggression on aggressive behavior. *Child Development*, 32, 37-44.
- Morgan, M. (1984). Heavy television viewing and perceived quality of life. *Journalism Quarterly*, 61(3), 499-504, 740.
- National Television Violence Study-Executive Summary (1994-1995). Studio City, CA: Media Scope, Inc.
- Nielsen, A. C. (2000). *Report on Television*. New York: A. C. Nielsen Company.
- Potter, W. J. (1999). *On media violence*. Thousand Oaks, CA: Sage.
- Potter, W. J., & Smith, S. (2000). The context of graphic portrayals of television violence. *Journal of Broadcasting & Electronic Media*, 44(2), 301-323.
- Potter, W. J., Vaughan, M. W., Warren, R., Howley, K., Land, A., & Hagemeyer, J. C. (1995). How real is the portrayal of aggression in television entertainment programming? *Journal of Broadcasting & Electronic Media*, 39(4), 496-516.
- Potter, W. J., & Ware, W. (1987). An analysis of the contexts of antisocial acts on prime-time television. *Communication Research*, 14, 116-124.
- Signorielli, N. (1990). Television's mean and dangerous world: A continuation of the Cultural Indicators perspective. In N. Signorielli & M. Morgan (Eds.), *Cultivation analysis: New directions in media effects research* (pp. 85-106). Newbury Park, CA: Sage Publications.
- Signorielli, N., & Bacue, A. (1999). Recognition and respect: A content analysis of prime-time television characters across three decades. *Sex Roles*, 40(7/8), 527-544.
- Signorielli, N., Gerbner, G., & Morgan, M. (1995). Violence on television: The Cultural Indicators Project. *Journal of Broadcasting & Electronic Media*, 39(2), 278-283.
- Signorielli, N., Gross, L., and Morgan, M. (1982). Violence in television programs: Ten years later. In D. Pearl, L. Bouthilet, and J. Lazar (eds.), *Television and social behavior: Ten years of scientific progress and implications for the eighties* (pp. 158-173). Rockville, MD: National Institute of Mental Health.
- Smith, S. L., Nathanson, A. I., & Wilson, B. J. (2002). Prime-time television: Assessing violence during the most popular viewing hours. *Journal of Communication*, 52(1), 84-111.
- Smith, S. L., Wilson, B. J., Kunkel, D., Linz, D., Potter, J., Colvin, C. M., & Donnerstein, E. (1998). *Violence in television programming overall: University of California, Santa Barbara Study*. In *National television violence study*, Vol. 3. Thousand Oaks, CA: Sage.
- Wilson, B. J., Kunkel, D., Linz, D., Potter, J., Donnerstein, E., Smith, S. L., Blumenthal, E., & Gray, T. (1997). *Television violence and its context: University of California, Santa Barbara study*. In *National television violence study*, Vol. 1. Thousand Oaks, CA: Sage.
- Wilson, B. J., Kunkel, D., Linz, D., Potter, J., Donnerstein, E., Smith, S. L., Blumenthal, E., & Berry, M. (1998). *Violence in television programming overall: University of California, Santa Barbara study*. In *National television violence study*, Vol. 2. Thousand Oaks, CA: Sage.

Excerpt from Signorielli, N. (in press; 2005). *Violence in the Media: A Reference Handbook*. Los Angeles, CA: ABC-CLIO.

Chapter 6

Facts and Figures

The chapter includes an update of some of the analyses traditionally conducted as part of the Cultural Indicators Project. Tables 1-9 present Indicators of Violence and the Violence Index from data collected in 5 decades (between 1967 and 2003) of research. Tables 10-18 give information about the characters involved in violence. The demographic analysis shows who is more likely to get hurt/killed or hurt/kill others. This analysis looks at differences among men, women, whites, and people of color in regard to their chances or likelihood of being involved in violence.

The tables are preceded by an discussion of the information presented in the tables. It briefly tells how the data in the tables was collected and gives a short description of what the tables tell us about television violence.

Update of Cultural Indicators Project Analyses

The first set of tables updates the typical analyses conducted and published as the Violence Profile of the Cultural Indicators Project. These tables list several key overall measures of violence that are combined to form the Violence Index (see, for example, Gerbner, Gross, Jackson-Beeck, Jeffries-Fox, & Signorielli, 1978). The last Violence Profile was prepared and distributed in 1993 (see, Gerbner, Morgan, & Signorielli, 1993). The data used in this analysis span almost 40 years, gathered between 1967 and 2003, and come from two sources. First, the data generated by the Cultural Indicators Project (1967 to 1992) when it was located at the Annenberg School for Communication at the University of Pennsylvania. These data were generated with funding provided by numerous agencies and grants, including the President's Commission on the Causes and Prevention of Violence, The Surgeon General's Study of Television and Social Behavior, National Institute of Mental Health, the American Medical Association, and other agencies. I am indebted to George Gerbner and the rest of my colleagues with whom I worked on the Cultural Indicators Project, for making this data set available for my continued research. Second, data collected at the University of Delaware between 1993 and 2003. These data were collected as part of ongoing class research projects and I wish to thank my numerous students for their help in this process. Although the data were generated at two different venues they are comparable because the University of Delaware data collection procedures replicated the definitions and methods originally developed and used in the Cultural Indicators Project at the University of Pennsylvania.

Background Information on the Violence Profile and Violence Index

The Violence Index looks at violence as a social relationship—looking at who does the

hurting or killing and who, in turn, gets hurt or killed. In this perspective the violence we see on television may be seen as symbolic in nature and typically used to demonstrate power. It tells us who can get away with what against whom—who does the hurting and who gets hurt. The measures included in the Violence Profile are based on a definition of violence that focuses on upon reliable and consistent observations of physical violence. Physical violence includes hurting or killing, or the plausible threat of being hurt or killed. The data do not include idle threats (“I’m going to get you someday”), verbal abuse, or gestures (e.g., shaking a fist at someone) that do not actually result in hurting and/or killing or actually threaten characters. Violence, if it meets the criteria of actual or real threats of physical violence, is included whether it takes place in a realistic/serious context or a fantasy/humorous context. Comic or humorous violence is included because we know from several studies that humor and fantasy may be simple and effective ways to convey serious lessons (see, for example, Ellis & Sekura, 1972; Haynes, 1978). Humor, in fact, may be the sugar coating that makes the violence more acceptable or enjoyable than other more serious presentations of violence. “Accidental” violence (car crashes) or “acts of nature” (tornados, hurricanes, earthquakes) are also included because television violence is created or written/edited into a script. As such it is always purposefully included and always claims victims, thus demonstrating power. Even some of the more recently telecast “reality” programs may include real violence that is purposely selected and edited by the producers or directors (gatekeepers) of the program and thus also tells a story of victimization.

The data are collected using the methods of a research procedure called content analysis. The first step in this procedure is to define the units or elements of analysis that will form the basis of the data collection. In this study three separate units or elements of analysis are isolated and included. First, the analysis looks at the entire program; second, it looks at the leading characters in the programs; and third, it isolates specific violent actions or episodes (scenes of violence confined to the same characters). All of the measures or variables included in the analysis are clearly defined and the data generated using them are tested for reliability and consistency. Each measure included in the Violence Index and in the other analyses meets the standards for reliability that are judged to be acceptable in content analysis procedures (see, for example, Krippendorff, 1980).

The data are gathered in the analysis of annual week-long samples of prime-time network broadcast programs. The samples were taken every fall (in late September and early October) between 1967 and 2003. The data gathered between 1967 and 1992 were generated at the University of Pennsylvania and the more recent data, that gathered between 1993 and 2003, were generated at the University of Delaware. Programs were not sampled during sweeps months (November or February) because these programs have been specially selected by the networks to generate larger audiences. In 1993 the samples were expanded to include three additional types or genres of programs—reality programs; award, game, and variety programs; and news magazine programs. Consequently, the tables for these types of programs only include data for two decades. Overall, there are 37 separate samples with a total of 2,836 programs and 10,294 leading characters.

The Violence Index looks at several different sets of observations and variables that are combined into a single indicator that measures and is sensitive to several different ways to isolate

and look at violence within the programs. It consists of three sets of observations, called **Prevalence, Rate, and Roles**.

Prevalence: the percent of programs that contain any violence – (%P).

Rate: the rate of violent actions within the programs calculated in two ways – the average number of violent actions per program (R/P) and the average number of violent actions per hour of programming (R/H). The rates are doubled in the calculation of the Violence Index because their absolute size is small compared to the measure of the prevalence of violence.

Roles: the percent of leading characters who are involved in violence (%V)—including those who commit violence (hurt or kill others), those who are victimized (are hurt or killed), or both. The percent of those who are involved in killing is added to the index two times because of the significance of killing and the story about victimization that killing tells.

These observations are combined into a summary figure—the Violence Index

$$(VI = \%P + 2(R/P) + 2(R/H) + \%V + \%K).$$

This index is sensitive to a wide and varied range of the many characteristics of television programs. In each sample, the individual measures included in the Violence Index have achieved high levels of intercoder reliability (consistency). Moreover, the index was subjected to a special analysis in the early 1980s and found to meet the statistical and empirical requirements one would expect from an index: unidimensionality (measuring one thing) and internal consistency or homogeneity (see, Signorielli, Gross, & Morgan, 1982). The Violence Index can be used to make comparisons over time (across decades) and among different genres of programs (situation comedies, action adventures, reality, news magazines, etc.) or time of broadcast (early evening vs. late evening). This section is made up of 9 separate tables, one for each separate analysis of the different types of programs found in network broadcast television's prime time hours as well as tables that compare early evening and late evening programs.

Table 1: All programs

Table 2: Situation comedies

Table 3: Action adventures

Table 4: Dramas (e.g. *ER*)

Table 5: Reality (e.g., *Cops*)

Table 6: Award, Game, Variety

Table 7: News Magazines (e.g., *60 Minutes*, *Dateline*)

Table 8: Early evening programs (broadcast between 7 p.m. until 9 p.m.)

Table 9: Late evening programs (broadcast between 9 p.m. until 11 p.m.)

In addition to the measures used to calculate the Violence Index, the tables include a measure of the percentage of programs that have violence that is a significant or major element or

part of the plot or story line. This gives yet another way to examine the of the amount of violence on prime time during the past 5 decades by eliminating those programs in which violence is not a particularly significant or important element of the story and concentration on programs in which violence plays a critical role. The Violence Index, however, is calculated using the same formulation (percent of programs that have any violence) set out and used in the original reports of the Cultural Indicators Project.

Trends in the Portrayal of Violence

The level of violence in prime time network broadcast programs (see Table 1) has dropped since the late 1960s when this program of research began. The percent of programs with violence was highest during the late 1960s and during the 1980s; it was lowest during the first four years of the 21st century (2000 to 2003). The percent of programs with violence that is significant to the story shows a similar pattern except for the slight rise in the samples gathered between 2000 and 2003 in which 37% of the programs have violence that is important for the story. The rates per program and per hour show some fluctuation by decade. Interestingly, the rate per program (R/P) in the most recent samples of programs is at one of the highest levels it has ever been (4.81 acts of violence per program); similarly, the rate per hour (R/H) is at its second highest level during the early 2000's (5.24 acts of violence per hour). Nevertheless, the average rate of violent actions per program did not change so much from decade to decade that the differences were statistically significant.¹ What has changed most dramatically, however, is the percentage of characters who are involved in violence. Involvement has decreased considerably since the 1960s. In the 1960s through the 1980s roughly half of all the leading characters had some involvement in violence—they were either hurt/killed themselves or hurt/killed other people. In the past two decades, however, the percentage of involvement has decreased to a third or fewer of the characters hurting/killing others or being hurt/killed themselves. These differences are statistically significant; the statistical analysis shows that percentages of characters involved in violence in the 1990s and 2000s are substantially different from those for the 1960s, the 1970s, and the 1980s.² Overall the differences in the Violence Index primarily reflect the trends in character's involvement, with the Index being at its lowest level in the most recent samples of programs.

Situation comedies (Table 2), as we would expect, have the least amount of violence, the smallest Violence Indices, and the fewest programs with violence that is a significant part of the story, and the smallest percentage of characters who are involved in violence. Again, there are no differences from decade to decade for the rate of violence actions per program but there are significant differences in the percentage of characters involved in violence. Again, percentages of involvement in the most recent samples (2000s) are statistically smaller than the percentages for

¹These differences were tested by calculating an analysis of variance for the rate per program. It was not statistically significant ($F=1.08$, $df=4,2831$; $p=.36$).

²Results of the analysis of variance: $F=132.45$, $df=4,10,289$; $p<.0001$)

the other decades.³ On the other hand, action-adventure-adventure programs (Table 3) have the largest Violence Indices, the highest proportion of programs with violence, particularly violence that is a significant element of the plot. Interestingly, the rates of violence actions per program and per hour are higher in the samples from the 1990s and from the first few years of the 21st century. Moreover, the differences in the rate per program for programs from 2000 to 2003 are statistically different from the rate per program for the 1960s and the 1970s.⁴ Yet, fewer characters were involved in violence during the 1990s and the 2000s than in the preceding three decades. Dramas (Table 4), which include programs such as *ER*, have a moderate amount of violence. Throughout these 5 decades about three-quarters of these programs had some violence and about four in ten had violence that was a significant part of the plot. The rates of violence, however, were not particularly high—about 3 or 4 acts of violence per programs and per hour of programming and the differences were not statistically significant. At the same time, characters' involvement in violence was significantly lower during the 1990s and the 2000s.⁵

Probably the least consistent genre of programming is reality (Table 5) programs. This is probably due to the fact that the nature of reality programming changed considerable from when these programs first made their debut during the early 1990s to the reality programs of the early 21st century. In the 1990s, reality programs typically were related to crime and law enforcement, with programs such as *Cops* and *America's Most Wanted*. In the past few seasons, however, reality programs have taken a different focus, including programs such as the *Survivor* series, *Big Brother* (a program that includes footage from "typical" days of young adults), and recently *The Bachelor* and similar programs geared toward finding "romance" or "a relationship." This shift in focus meant that reality programs in the 1990s were more violent than those in the 2000s.⁶ Game and Variety programs (Table 6), much like the reality programs, show a lot of variation from decade to decade. News magazines (Table 7) were also fairly consistent in their portrayal of violence, with virtually no change from the 1990s to the early 21st century. Finally, Tables 8 and 9 show that there is not much difference in the amount of violence in programs aired in the early or late evening hours. Early evening programs are not less violent than those seen later in the evening even though one might expect to find less violence in the early evening because more children, particularly young children, typically watch television in the early evening rather than in the hours later in the evening.

³Results of the analysis of variance: rate/program ($F=.1366$, $df=4,1128$, ns) and involvement in violence ($F=5.06$, $df=4,3590$; $p<.001$)

⁴ Results of the analysis of variance for action programs: Rate per program ($F=5.03$, $df=4.840$; $p<.001$) and for involvement in violence ($F=27.43$, $df=4,3123$; $p<.0001$).

⁵Results of the analysis of variance for Dramas: Rate per program ($F=1.19$, $df=4, 613$; ns) and for involvement in violence ($F=7.17$, $df=4,2594$; $p<.0001$).

⁶Results of the analysis of variance for Reality Programs: Rate per program ($F=5.68$, $df=1,67$; $p<.02$) and for involvement in violence ($F=4.22$, $df=1,300$; $p<.05$).

Table 1
Measures of Violence: All Programs, Prime Time
(1967 - 2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|-------------------------------|--------|--------|--------|--------|--------|---------|
| SAMPLES (100%) | N | N | N | N | N | N |
| Programs | 185 | 625 | 689 | 883 | 454 | 2,836 |
| N of Leading Characters | 558 | 1,985 | 2,060 | 3,543 | 2,148 | 10,294 |
| N of Hours of Programming | 163.75 | 585.83 | 600.45 | 728.27 | 411.63 | 2,489.9 |
| | | | | | | |
| PREVALENCE | % | % | % | % | % | % |
| Programs with violence (%P) | 73.5 | 70.7 | 72.3 | 64.2 | 60.4 | 67.6 |
| Violence Significant to Plot | 50.8 | 50.9 | 47.5 | 31.8 | 37.2 | 41.9 |
| | | | | | | |
| RATE | N | N | N | N | N | N |
| Number of Violent Acts | 781 | 3,043 | 3,325 | 3,727 | 2,184 | 13,060 |
| Rate per Program (R/P) | 4.22 | 4.87 | 4.83 | 4.22 | 4.81 | 4.61 |
| Rate per Hour (R/H) | 5.19 | 5.54 | 5.11 | 5.31 | 5.24 | 4.77 |
| | | | | | | |
| ROLES | % | % | % | % | % | % |
| Percent of Leading Characters | | | | | | |
| Involved in Violence (%V) | 59.0 | 53.7 | 52.5 | 33.5 | 29.9 | 41.8 |
| Involved in Killing (%K) | 13.8 | 12.1 | 9.0 | 6.2 | 7.6 | 8.6 |
| | | | | | | |
| Violence Index | 165.12 | 157.32 | 153.68 | 122.96 | 118.00 | 136.76 |

Table 2
Measures of Violence: Situation Comedies, Prime Time
(1967 - 2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|-------------------------------|-------|-------|-------|-------|-------|-------|
| SAMPLES (100%) | N | N | N | N | N | N |
| Programs | 70 | 240 | 261 | 413 | 149 | 1,133 |
| N of Leading Characters | 194 | 639 | 623 | 1,511 | 628 | 3,595 |
| N of Hours of Programming | 35.5 | 124.0 | 132.0 | 208.5 | 79.5 | 579.5 |
| | | | | | | |
| PREVALENCE | % | % | % | % | % | % |
| Programs with violence (%P) | 44.3 | 42.1 | 41.8 | 46.0 | 40.9 | 43.4 |
| Violence Significant to Plot | 12.9 | 13.8 | 10.0 | 6.3 | 5.4 | 9.0 |
| | | | | | | |
| RATE | N | N | N | N | N | N |
| Number of Violent Acts | 102 | 326 | 331 | 588 | 201 | 1,548 |
| Rate per Program (R/P) | 1.46 | 1.36 | 1.27 | 1.42 | 1.35 | 1.37 |
| Rate per Hour (R/H) | 2.87 | 2.63 | 2.51 | 2.82 | 2.53 | 2.67 |
| | | | | | | |
| ROLES | % | % | % | % | % | % |
| Percent of Leading Characters | | | | | | |
| Involved in Violence (%V) | 30.4 | 26.1 | 28.1 | 23.6 | 18.9 | 24.4 |
| Involved in Killing (%K) | 1.5 | 0.0 | 0.5 | 0.3 | 0.8 | 0.4 |
| | | | | | | |
| Violence Index | 84.86 | 76.18 | 77.96 | 79.38 | 68.36 | 76.28 |

Table 3
Measures of Violence: Action-Adventure Programs, Prime Time
(1967 - 2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|-------------------------------|--------|--------|--------|--------|--------|--------|
| SAMPLES (100%) | N | N | N | N | N | N |
| Programs | 85 | 275 | 235 | 172 | 87 | 854 |
| N of Leading Characters | 273 | 972 | 756 | 714 | 413 | 3,128 |
| N of Hours of Programming | 93.25 | 328.90 | 262.80 | 199.40 | 98.00 | 983.00 |
| | | | | | | |
| PREVALENCE | % | % | % | % | % | % |
| Programs with violence (%P) | 97.6 | 96.0 | 98.3 | 94.8 | 93.1 | 96.3 |
| Violence Significant to Plot | 88.2 | 87.6 | 91.1 | 74.4 | 86.2 | 85.8 |
| | | | | | | |
| RATE | N | N | N | N | N | N |
| Number of Violent Acts | 598 | 2,259 | 2,239 | 1,733 | 1,057 | 7,886 |
| Rate per Program (R/P) | 7.04 | 8.21 | 9.53 | 10.08 | 12.15 | 9.23 |
| Rate per Hour (R/H) | 6.41 | 6.87 | 8.52 | 8.69 | 10.72 | 8.02 |
| | | | | | | |
| ROLES | % | % | % | % | % | % |
| Percent of Leading Characters | | | | | | |
| Involved in Violence (%V) | 82.8 | 76.0 | 82.4 | 64.6 | 61.5 | 73.6 |
| Involved in Killing (%K) | 26.0 | 21.8 | 19.6 | 18.2 | 25.2 | 21.3 |
| | | | | | | |
| Violence Index | 233.30 | 223.96 | 236.40 | 215.14 | 225.54 | 225.70 |

Table 4
Measures of Violence: Dramas, Prime-Time
(1967 - 2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|-------------------------------|--------|--------|--------|--------|--------|--------|
| SAMPLES (100%) | N | N | N | N | N | N |
| Programs | 30 | 110 | 193 | 174 | 111 | 618 |
| N of Leading Characters | 91 | 374 | 681 | 877 | 576 | 2,599 |
| N of Hours of Programming | 35.00 | 132.90 | 205.60 | 208.00 | 131.50 | 713.10 |
| | | | | | | |
| PREVALENCE | % | % | % | % | % | % |
| Programs with violence (%P) | 73.3 | 70.0 | 81.9 | 74.7 | 75.7 | 76.2 |
| Violence Significant to Plot | 33.3 | 40.0 | 45.1 | 40.8 | 45.0 | 42.4 |
| | | | | | | |
| RATE | N | N | N | N | N | N |
| Number of Violent Acts | 81 | 458 | 755 | 576 | 492 | 2,362 |
| Rate per Program (R/P) | 2.70 | 4.16 | 3.91 | 3.31 | 4.43 | 3.82 |
| Rate per Hour (R/H) | 2.31 | 3.45 | 3.67 | 2.77 | 3.74 | 3.31 |
| | | | | | | |
| ROLES | % | % | % | % | % | % |
| Percent of Leading Characters | | | | | | |
| Involved in Violence (%V) | 48.4 | 42.8 | 41.6 | 32.6 | 32.6 | 37.0 |
| Involved in Killing (%K) | 3.3 | 7.8 | 5.1 | 6.3 | 7.8 | 6.4 |
| | | | | | | |
| Violence Index | 135.02 | 135.82 | 143.76 | 125.76 | 132.44 | 133.86 |

Table 5
Measures of Violence: Reality Programs in Prime Time
(1993 - 2003)

| | 1990s | 2000s | Total |
|-------------------------------|--------|-------|--------|
| SAMPLES (100%) | N | N | N |
| Programs | 30 | 39 | 69 |
| N of Leading Characters | 124 | 178 | 302 |
| N of Hours of Programming | 24.50 | 36.50 | 61.0 |
| | | | |
| PREVALENCE | % | % | % |
| Programs with violence (%P) | 90.0 | 50.0 | 72.7 |
| Violence Significant to Plot | 86.7 | 43.6 | 62.3 |
| | | | |
| RATE | N | N | N |
| Number of Violent Acts | 448 | 159 | 607 |
| Rate per Program (R/P) | 14.93 | 4.08 | 8.80 |
| Rate per Hour (R/H) | 18.29 | 4.36 | 9.95 |
| | | | |
| ROLES | % | % | % |
| Percent of Leading Characters | | | |
| Involved in Violence (%V) | 38.7 | 27.5 | 32.1 |
| Involved in Killing (%K) | 13.7 | 3.9 | 7.9 |
| | | | |
| Violence Index | 208.84 | 98.28 | 150.00 |

Table 6
Measures of Violence: Award, Game, Variety Prime Time Programs
(1993 - 2003)

| | 1990s | 2000s | Total |
|-------------------------------|--------|-------|-------|
| SAMPLES (100%) | N | N | N |
| Programs | 19 | 29 | 48 |
| N of Leading Characters | 50 | 141 | 191 |
| N of Hours of Programming | 16.00 | 26.55 | 42.55 |
| | | | |
| PREVALENCE | % | % | % |
| Programs with violence (%P) | 63.2 | 17.2 | 35.4 |
| Violence Significant to Plot | 10.5 | 10.3 | 10.4 |
| | | | |
| RATE | N | N | N |
| Number of Violent Acts | 101 | 171 | 272 |
| Rate per Program (R/P) | 5.32 | 5.90 | 5.67 |
| Rate per Hour (R/H) | 6.31 | 6.44 | 6.39 |
| | | | |
| ROLES | % | % | % |
| Percent of Leading Characters | | | |
| Involved in Violence (%V) | 36.0 | 9.2 | 16.2 |
| Involved in Killing (%K) | 0.0 | 0.0 | 0.0 |
| | | | |
| Violence Index | 122.46 | 51.08 | 75.72 |

Table 7
Measures of Violence: News Magazine Programs in Prime Time
(1993 - 2003)

| | 1990s | 2000s | Total |
|-------------------------------|-------|-------|--------|
| SAMPLES (100%) | N | N | N |
| Programs | 75 | 39 | 114 |
| N of Leading Characters | 266 | 210 | 476 |
| N of Hours of Programing | 71.75 | 39.00 | 110.75 |
| | | | |
| PREVALENCE | % | % | % |
| Programs with violence (%P) | 60.0 | 51.3 | 57.0 |
| Violence Significant to Plot | 37.3 | 41.0 | 38.6 |
| | | | |
| RATE | N | N | N |
| Number of Violent Acts | 281 | 104 | 385 |
| Rate per Program (R/P) | 3.75 | 2.67 | 3.38 |
| Rate per Hour (R/H) | 3.92 | 2.67 | 3.48 |
| | | | |
| ROLES | % | % | % |
| Percent of Leading Characters | | | |
| Involved in Violence (%V) | 6.8 | 9.5 | 8.0 |
| Involved in Killing (%K) | 3.4 | 1.0 | 2.3 |
| | | | |
| Violence Index | 85.54 | 72.48 | 81.02 |

Table 8
Measures of Violence: Early Evening Prime Time Programs
(1967 - 2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|-------------------------------|--------|--------|--------|--------|--------|---------|
| SAMPLES (100%) | N | N | N | N | N | N |
| Programs | 112 | 297 | 303 | 425 | 227 | 1,364 |
| N of Leading Characters | 335 | 906 | 798 | 1,682 | 1,073 | 4,794 |
| N of Hours of Programming | 84.25 | 246.20 | 218.30 | 321.20 | 207.10 | 1079.00 |
| | | | | | | |
| PREVALENCE | % | % | % | % | % | % |
| Programs with violence (%P) | 72.3 | 64.6 | 69.6 | 62.8 | 53.7 | 64.0 |
| Violence Significant to Plot | 52.7 | 44.1 | 43.6 | 29.4 | 27.8 | 37.4 |
| | | | | | | |
| RATE | N | N | N | N | N | N |
| Number of Violent Acts | 485 | 1,156 | 1,211 | 1,852 | 1,208 | 5,912 |
| Rate per Program (R/P) | 4.33 | 3.89 | 4.00 | 4.36 | 5.32 | 4.33 |
| Rate per Hour (R/H) | 5.76 | 4.70 | 5.55 | 5.77 | 5.83 | 5.49 |
| | | | | | | |
| ROLES | % | % | % | % | % | % |
| Percent of Leading Characters | | | | | | |
| Involved in Violence (%V) | 59.7 | 46.4 | 55.6 | 33.2 | 27.6 | 40.0 |
| Involved in Killing (%K) | 16.1 | 6.7 | 6.9 | 4.9 | 7.2 | 6.9 |
| | | | | | | |
| Violence Index | 168.28 | 134.88 | 151.20 | 121.16 | 110.80 | 130.54 |

Table 9
Measures of Violence: Late Evening Prime Time Programs
(1967 - 2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|-------------------------------|--------|--------|--------|--------|--------|---------|
| SAMPLES (100%) | N | N | N | N | N | N |
| Programs | 73 | 328 | 386 | 458 | 227 | 1,472 |
| N of Leading Characters | 223 | 1,079 | 1,260 | 1,854 | 1,075 | 5,491 |
| N of Hours of Programming | 79.50 | 339.70 | 381.20 | 407.10 | 204.50 | 1,413.0 |
| | | | | | | |
| PREVALENCE | % | % | % | % | % | % |
| Programs with violence (%P) | 75.3 | 76.2 | 74.4 | 65.5 | 67.0 | 70.9 |
| Violence Significant to Plot | 47.9 | 57.0 | 50.5 | 34.1 | 46.7 | 46.1 |
| | | | | | | |
| RATE | N | N | N | N | N | N |
| Number of Violent Acts | 296 | 1,887 | 2,114 | 1,875 | 976 | 7,148 |
| Rate per Program (R/P) | 4.05 | 5.75 | 5.48 | 4.09 | 4.30 | 4.86 |
| Rate per Hour (R/H) | 3.72 | 5.55 | 5.53 | 4.61 | 4.77 | 5.06 |
| | | | | | | |
| ROLES | % | % | % | % | % | % |
| Percent of Leading Characters | | | | | | |
| Involved in Violence (%V) | 57.8 | 59.9 | 50.6 | 33.8 | 32.3 | 43.5 |
| Involved in Killing (%K) | 10.3 | 16.7 | 10.4 | 7.3 | 8.0 | 10.1 |
| | | | | | | |
| Violence Index | 158.94 | 175.40 | 157.42 | 124.00 | 125.44 | 144.34 |

Character's Involvement in Violence - Demographic Differences

The next set of tables (Tables 10 - 18) look at some of the demographic differences in characters' involvement in violence. These tables compare on gender (men and women) and race (white and minorities). There are several measures of involvement. Overall involvement in violence takes two things into account. It measures whether or not the character is a perpetrator or commits violence by hurting and/or killing other characters and also considers whether or not the character is a victim of violence—does the character get hurt or killed. These tables present 5 different measures of involvement in violence. First, overall involvement in violence—the percentage of characters who are either perpetrators or victims. Second, involvement as perpetrators—the percentage of characters who hurt or kill other characters. Third, involvement as victims—the percentage of characters who are hurt or are killed. Fourth, the percent of characters who are both perpetrators and victims; these are the characters who both hurt or kill and in turn are hurt or killed themselves. The last measure of involvement is a ratio of whether the characters are more likely to be perpetrators or victims of violence. As television typically favors victims over perpetrators, this last number gives the number of victims for every 10 perpetrators.

These tables also show that the percentages of characters involved in violence has decreased during the past 40 years. In the 1960s and 1970s and into the 1980s about half of the characters were typically involved in some type of violence. In the more recent samples, however, involvement has decreased to about a third or fewer of the characters. The ratios that compare being a perpetrator to being a victim of violence show, for the most part, that the differences are relatively small. For example, in the 1960s and 1970s female leading characters were somewhat more likely to be victims than perpetrators. In the 1960s, there were 12 female victims for every 10 female perpetrators and in the 1970s there were 13 female victims for every 10 female perpetrators. In the more recent samples, however, female characters are about equally likely to be perpetrators as victims. The 1960s and to some extent the 1970s were also the decades in which minority characters were more likely to be cast as victims than as perpetrators. In more recent samples, however, minority characters are equally likely to be victims as perpetrators of violence. What this means is that in today's television programs seen on the broadcast networks during the prime time (8 to 11 p.m.) hours men, women, whites, and minorities are equally likely to be involved in violence. Women and minorities are as likely to be perpetrators as victims of violence.

Table 10
Leading Characters' Involvement in Violence
(1967-2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|--|-------|-------|-------|-------|-------|--------|
| Number of Leading Characters | 558 | 1,985 | 2,060 | 3,543 | 2,148 | 10,294 |
| Involvement in Violence | % | % | % | % | % | % |
| Either Perpetrator or Victim | 59.0 | 53.7 | 52.5 | 33.5 | 29.9 | 41.8 |
| Only Perpetrators | 42.8 | 40.4 | 40.4 | 22.9 | 21.9 | 30.6 |
| Only Victims | 49.3 | 44.8 | 43.4 | 22.9 | 21.5 | 32.4 |
| Both Perpetrator & Victim | 33.2 | 31.5 | 31.4 | 12.6 | 13.5 | 21.3 |
| | | | | | | |
| Number of Victims for every 10 perpetrators | 11.5 | 11.1 | 10.8 | 10.0 | 10.2 | 10.6 |

Table 11
Male Characters' Involvement in Violence
(1967-2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|--|-------|-------|-------|-------|-------|-------|
| Number of Male Characters | 408 | 1,400 | 1,348 | 2,112 | 1,284 | 6,552 |
| Involvement in Violence | % | % | % | % | % | % |
| Either Perpetrator or Victim | 64.5 | 59.1 | 58.1 | 38.4 | 33.6 | 47.6 |
| Only Perpetrators | 48.5 | 46.5 | 46.5 | 26.5 | 25.0 | 36.0 |
| Only Victims | 55.4 | 49.7 | 49.8 | 27.8 | 23.6 | 37.9 |
| Both Perpetrator & Victim | 39.5 | 37.1 | 38.2 | 16.2 | 15.1 | 26.4 |
| | | | | | | |
| Number of Victims for every 10 perpetrators | 11.4 | 10.7 | 10.7 | 10.5 | 10.6 | 10.5 |

Table 12
Female Characters' Involvement in Violence
(1967-2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|--|-------|-------|-------|-------|-------|-------|
| Number of Female Characters | 150 | 582 | 705 | 1,423 | 859 | 3,719 |
| Involvement in Violence | % | % | % | % | % | % |
| Either Perpetrator or Victim | 44.0 | 40.4 | 41.6 | 26.3 | 24.1 | 31.6 |
| Only Perpetrators | 27.3 | 25.3 | 28.7 | 17.5 | 17.0 | 21.1 |
| Only Victims | 32.7 | 33.0 | 31.1 | 15.7 | 17.9 | 22.5 |
| Both Perpetrator & Victim | 16.0 | 17.9 | 18.2 | 7.0 | 10.8 | 12.1 |
| | | | | | | |
| Number of Victims for every 10 perpetrators | 12.2 | 13.1 | 10.8 | 11.7 | 10.5 | 10.7 |

Table 13
White Characters' Involvement in Violence
(1967-2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|--|-------|-------|-------|-------|-------|-------|
| Number of White Characters | 500 | 1,780 | 1,814 | 2,907 | 1,698 | 8,699 |
| Involvement in Violence | % | % | % | % | % | % |
| Either Perpetrator or Victim | 58.6 | 53.6 | 52.6 | 32.9 | 29.0 | 42.0 |
| Only Perpetrators | 43.0 | 40.2 | 40.5 | 22.2 | 20.9 | 30.6 |
| Only Victims | 48.2 | 44.6 | 43.3 | 22.7 | 20.5 | 32.5 |
| Both Perpetrator & Victim | 32.6 | 31.2 | 31.2 | 12.2 | 12.5 | 21.3 |
| | | | | | | |
| Number of Victims for every 10 perpetrators | 11.2 | 11.1 | 10.7 | 10.2 | 10.2 | 10.6 |

Table 14
Minority Characters' Involvement in Violence
(1967-2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|---|-------|-------|-------|-------|-------|-------|
| Number of Minority Characters | 56 | 182 | 199 | 606 | 438 | 1,481 |
| Involvement in Violence | % | % | % | % | % | % |
| Either Perpetrator or Victim | 62.5 | 51.1 | 47.2 | 35.3 | 33.1 | 39.2 |
| Only Perpetrators | 41.1 | 39.0 | 35.7 | 25.6 | 25.1 | 29.1 |
| Only Victims | 58.9 | 44.0 | 40.7 | 23.1 | 24.7 | 29.8 |
| Both Perpetrator & Victim | 37.5 | 31.9 | 29.1 | 13.5 | 16.7 | 19.7 |
| | | | | | | |
| Number of Victims for every 10 perpetrators | 15.0 | 11.3 | 11.4 | 11.1 | 10.3 | 10.3 |

Table 15
White Male Characters' Involvement in Violence
(1967-2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|---|-------|-------|-------|-------|-------|-------|
| Number of White Males | 361 | 1,245 | 1,177 | 1,721 | 1,013 | 5,517 |
| Involvement in Violence | % | % | % | % | % | % |
| Either Perpetrator or Victim | 64.0 | 58.9 | 58.2 | 37.8 | 32.7 | 47.7 |
| Only Perpetrators | 48.5 | 46.3 | 46.6 | 25.7 | 23.9 | 36.0 |
| Only Victims | 32.4 | 33.6 | 31.6 | 15.6 | 17.4 | 23.0 |
| Both Perpetrator & Victim | 38.8 | 36.7 | 38.1 | 15.9 | 14.0 | 26.5 |
| | | | | | | |
| Number of Victims for every 10 perpetrators | 10.6 | 11.2 | 10.7 | 10.6 | 10.7 | 10.6* |

*reversed: there are 10.6 perpetrators for every 10 victims

Table 16
White Female Characters' Involvement in Violence
(1967-2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|---|-------|-------|-------|-------|-------|-------|
| Number of White Females | 139 | 535 | 637 | 1,186 | 684 | 3,181 |
| Involvement in Violence | % | % | % | % | % | % |
| Either Perpetrator or Victim | 44.6 | 41.3 | 42.2 | 25.9 | 23.7 | 32.1 |
| Only Perpetrators | 28.8 | 26.0 | 29.2 | 17.1 | 16.5 | 21.4 |
| Only Victims | 32.4 | 33.6 | 31.6 | 15.6 | 17.4 | 23.0 |
| Both Perpetrator & Victim | 16.5 | 18.3 | 18.5 | 6.9 | 10.2 | 12.3 |
| | | | | | | |
| Number of Victims for every 10 perpetrators | 10.7 | 11.3 | 12.9 | 10.8 | 11.0* | 10.5 |

* Reversed: there are 11.0 perpetrators for every 10 victims

Table 17
Minority Male Characters' Involvement in Violence
(1967-2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|---|-------|-------|-------|-------|-------|-------|
| Number of Minority Males | 47 | 141 | 135 | 372 | 265 | 960 |
| Involvement in Violence | % | % | % | % | % | % |
| Either Perpetrator or Victim | 68.1 | 58.9 | 54.1 | 39.8 | 37.4 | 45.3 |
| Only Perpetrators | 48.9 | 46.8 | 42.2 | 29.6 | 29.1 | 34.7 |
| Only Victims | 63.8 | 50.4 | 48.1 | 27.4 | 27.2 | 35.4 |
| Both Perpetrator & Victim | 44.7 | 38.3 | 36.3 | 17.2 | 18.9 | 24.8 |
| | | | | | | |
| Number of Victims for every 10 perpetrators | 13.0 | 10.8 | 11.4 | 10.8* | 10.7* | 10.2 |

*reversed: there are more perpetrators than victims of violence

Table 18
 Minority Female Characters' Involvement in Violence
 (1967-2003)

| | 1960s | 1970s | 1980s | 1990s | 2000s | Total |
|--|-----------------|-------|-------|-------|-------|-------|
| Number of Minority Females | 9 | 41 | 62 | 232 | 172 | 516 |
| Involvement in Violence | % | % | % | % | % | % |
| Either Perpetrator or Victim | 33.3 | 24.4 | 33.9 | 28.0 | 26.2 | 27.9 |
| Only Perpetrators | 0 | 12.2 | 22.6 | 19.0 | 19.2 | 18.6 |
| Only Victims | 33.3 | 22.0 | 25.8 | 15.9 | 20.3 | 19.4 |
| Both Perpetrator & Victim | 0 | 9.8 | 14.5 | 7.3 | 13.4 | 10.3 |
| | | | | | | |
| Number of Victims for every 10 perpetrators | only victims | 18.0 | 11.4 | 11.9* | 10.6 | 10.4 |

*reversed: there are 11.9 perpetrators for every 10 victims

References

- Ellis, G. T., & Sekera, F., III (1972). The effects of aggressive cartoons on the behavior of first grade children. *Journal of Psychology*, 81(1), 7-43.
- Gerbner, G., Gross, L., Jackson-Beeck, M., Jeffries-Fox, S., & Signorielli, N. (1978). Cultural indicators: Violence profile no. 9. *Journal of Communication*, 28(3), 176-207.
- Gerbner, G., Morgan, M., & Signorielli, N. (1993). *Television violence profile no. 16: The turning point*. Philadelphia, PA: The Annenberg School for Communication.
- Haynes, R. B. (1978) children's perceptions of 'comic' and 'authentic' cartoon violence. *Journal of Broadcasting*, 22(1), 63-79.
- Krippendorff, K (1980). *Content Analysis*. Thousand Oaks, CA: Sage Publications.
- Signorielli, N., Gross, L., & Morgan, M. (1982). Violence in television programs: Ten years later. In D. Pearl, L. Bouthilet, & J. Lazar (Eds.), *Television and social behavior: Ten years of scientific progress and implications for the eighties* (pp. 158-173). Rockville, MD: National Institute of Mental Health.